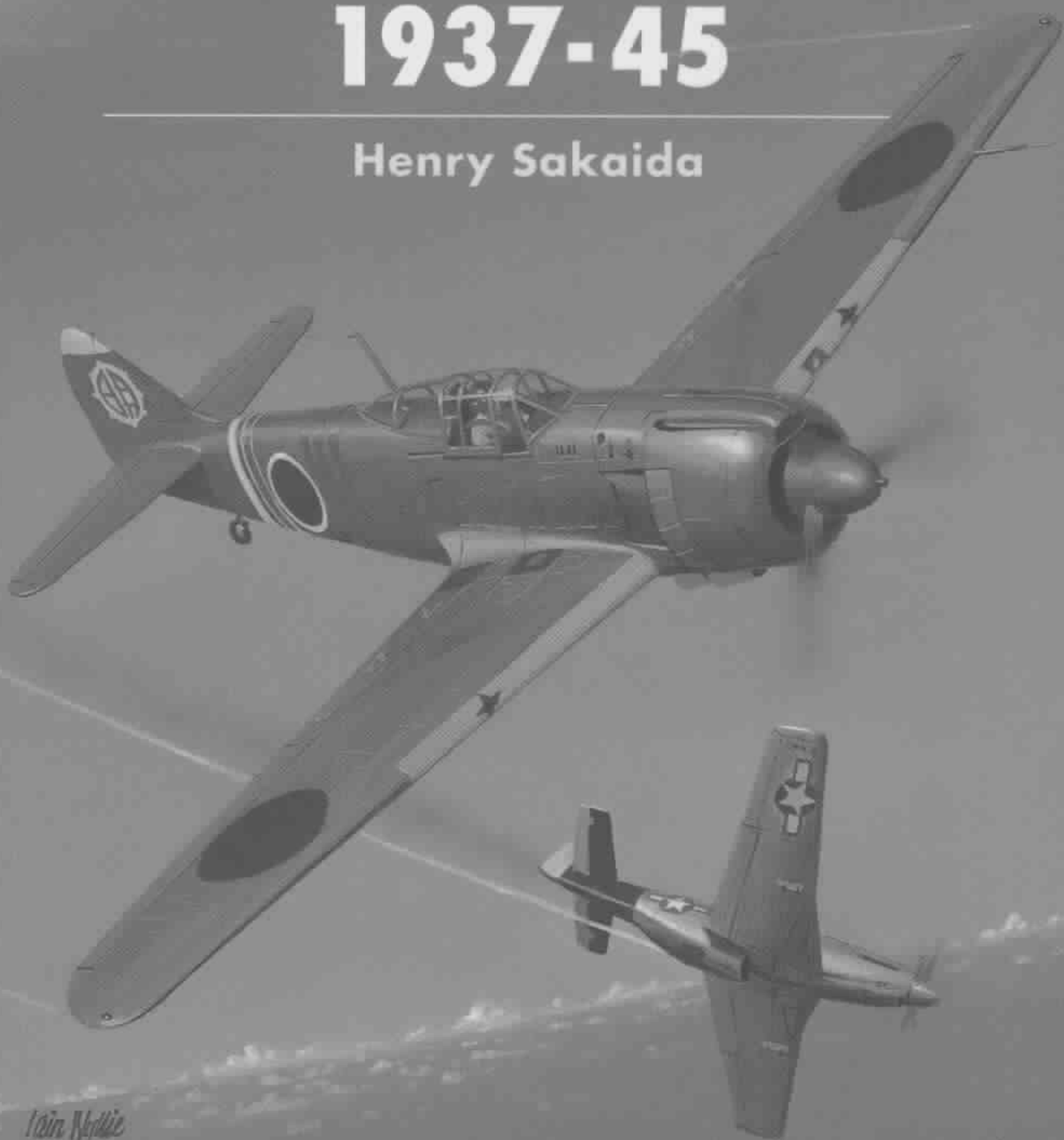


Japanese Army Air Force Aces 1937-45

Henry Sakaida



THE CHINA AND NOMONHAN INCIDENTS

Japan's ambitious plan to become the master of Greater Asia laid the foundation for the build-up of its infant Army and Navy Air Forces in the 1930s. The staging area for confrontation was in the vast region of Manchuria, in northern China, which was surrounded by Inner and Outer Mongolia, the Soviet Union and Korea. Japan had defeated China during a short war in 1894, forcing the latter to cede Formosa and the Pescadores. It then went to war with Russia in 1904 and won a quick and decisive victory – the Russians in turn were forced to relinquish their lease of Manchurian territory.

Siding with the Western powers at the outbreak of World War I, the Japanese took over German possessions in China and the Pacific, taking advantage of the weak Chinese government which was in no position to prevent Japanese expansionist policies. Through strong-armed political tactics, Japan gained interests in Manchuria, and immediately set out to gain control of the Southern Manchurian Railway.

An international agreement permitted the Japanese occupiers to raise a formidable military force known as the Kwantung Army. This rogue militia was created both to protect Japanese interests from Chinese bandits and guard the Southern Manchurian Railway. Through a series of clashes with Chinese troops, it raided and occupied key cities in Manchuria.

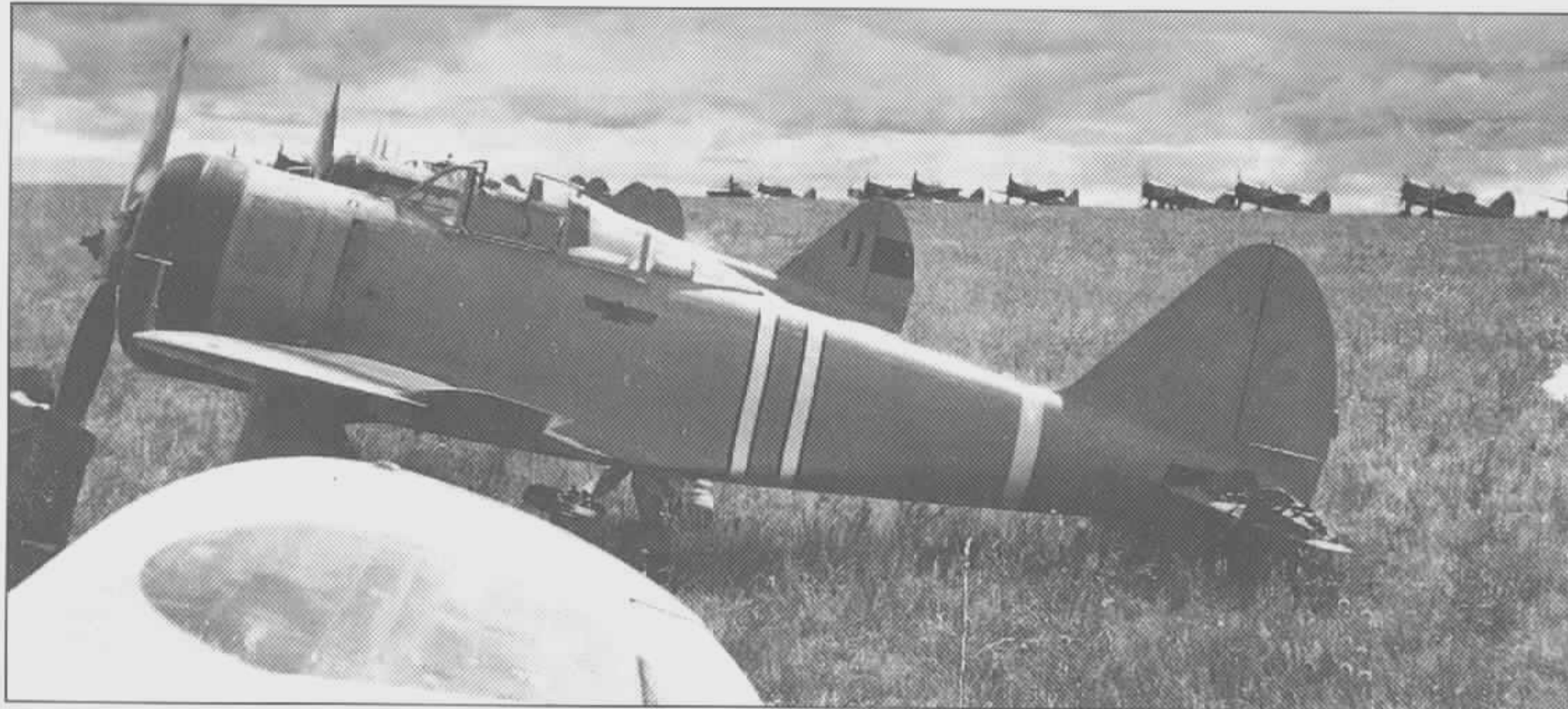
In 1931 Japan seized Manchuria from China and set up a puppet government. Thousands of Japanese colonists from the homeland flocked to the frontier territory in search of new opportunities. The Japanese established mines, factories and a railway system to exploit the abundant natural resources of the region.

Anti-Japanese sentiments in China came to the boil on 7 July 1937 when Japanese and Chinese troops clashed on the Marco Polo Bridge near Beijing. The local skirmish exploded into an undeclared war which gave the Japanese an excuse to grab more Chinese territory. As the Japanese military moved forward, it deployed its Air Force in ground support roles.

The standard Japanese Army Air

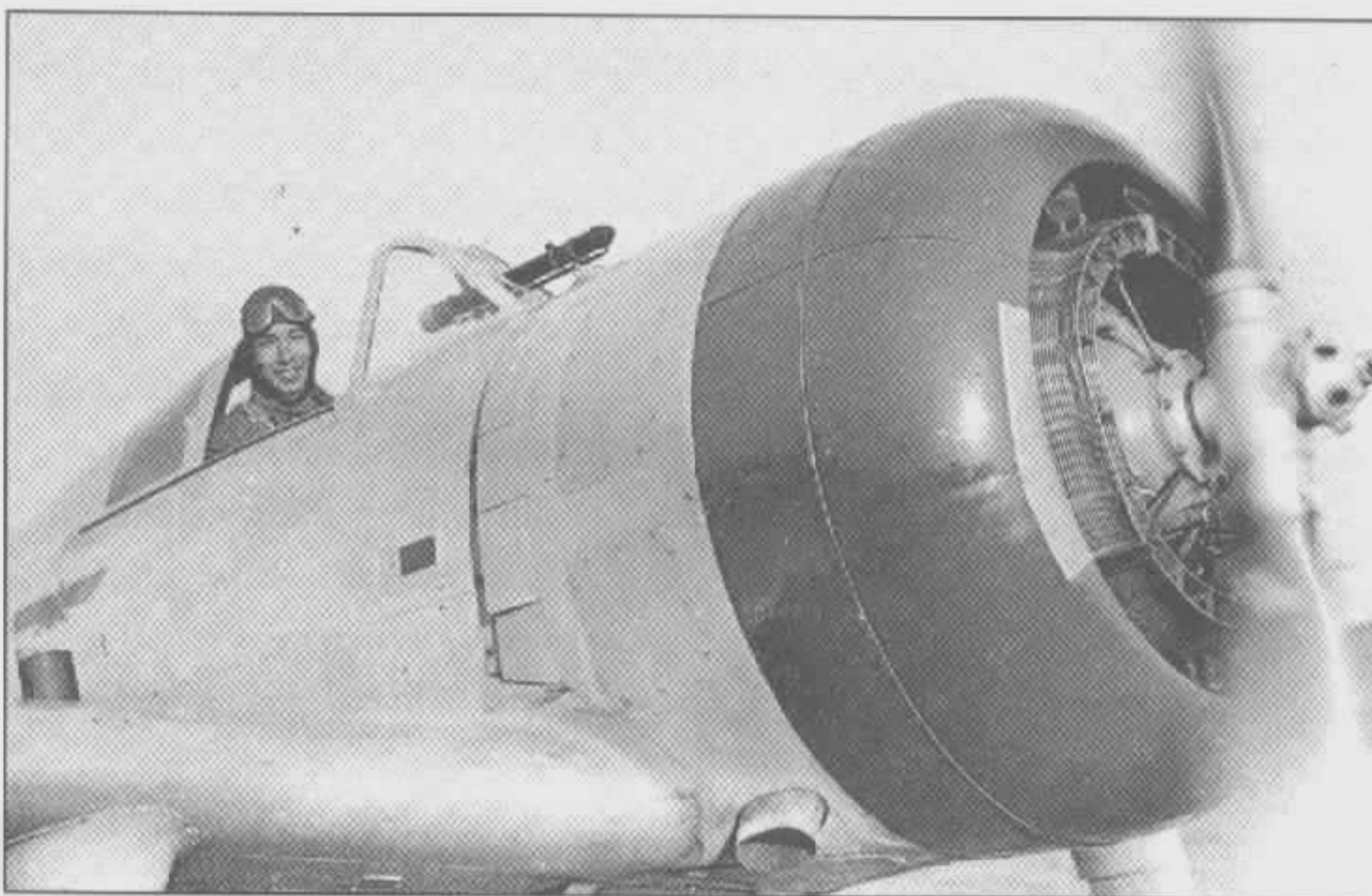
Ki-27-Ko 'Nates' of the 1st Chutai of the 64th Sentai are prepared for their next sortie somewhere on the Nomonhan Plain in October 1939 (via Phil Jarrett)





A fair chunk of the 64th Sentai's operational strength in June 1939 is seen in this view, taken from the cockpit of a 'Nate'. The machine parked up next to it is a 1st Chutai machine, whilst the next Ki-27-Ko in line belongs to the 3rd Chutai (via Phil Jarrett)

Having got its ever-reliable Nakajima Ha-1b radial engine ticking over nicely, Sgt Maj Hiroshi Sekiguchi poses in the cockpit of his 1st Chutai/64th Sentai Ki-27-Ko prior to taxiing out for take-off at the start of yet another combat sortie in the summer of 1939. Sekiguchi achieved ace status in this conflict, and latter reached the rank of first lieutenant in New Guinea during World War 2. His total score was seven kills (via Phil Jarrett)



Force (JAAF) fighter at the time was the Kawasaki Ki-10 Type 95 'Perry', an advanced biplane fighter that could attain speeds of up to 248 mph at its optimum ceiling of 9845 ft, and which was armed with two 7.7 mm machine guns in the nose

The Chinese Air Force (CAF) of the Kuomintang Government was no match for the Japanese opposition, being a 'mongrel' force equipped with a mix of imported Italian, American, German and Soviet aircraft. In addition to the CAF, the various provincial warlords also had their own squadrons. These factionalised air units, along with the CAF, were principally used to further their own political interests, and when not flying against the Japanese invaders, they were fighting amongst themselves. The CAF, for example, operated against the Chinese communists in various 'Bandit Extermination Campaigns' throughout the 1930s.

The backbone of the CAF was the Curtiss Hawk II biplane fighter, whilst other aircraft in their arsenal included the Vought Corsair (biplane) and Douglas O-2. Their initial combats with Japanese naval fighters (the A5M2 Type 96 'Claude') proved disastrous, and when the remnants of the force flew against the JAAF, they fared no better.

Although the army units won battle honours in July 1937 (the 10th Dokuritsu Hiko Chutai, 33rd and 64th Sentais and the 8th Hiko Daitai

being the principal units involved), it was not until 19 September 1937 that a flight from the 33rd Sentai, led by Lt Yoshio Hirosei, shot down four out of six Chinese fighters encountered during a routine patrol, and thus claim the first ever victories scored by the JAAF.

Large quantities of Soviet aircraft started pouring into China over the next few months following the signing of a non-aggression pact between China and the Soviet Union on 21 August 1937. With the agreement ratified, the former



Members of the 1st Chutai, 11th Sentai, pose for a souvenir snapshot. The aces included in this group photo could boast almost 150 victory claims between them! Some of the pilots are; Capt Kenji Shimada (sitting front – 40 kills), MSgt Bunji Yoshiyama (displaying his victim's Tokarev pistol – 25 kills), 2Lt Tomoari Hasegawa (fourth from right – 19 kills) and WO Hiromichi Shinohara (far right – 58 kills). (via Y Izawa)

Ranking JAAF ace Sgt Hiromichi Shinohara flew this 1st Chutai/64th Sentai Ki-27-Otsu during the first weeks of the Nomonhan Incident in the summer of 1939. It is seen here adorned with ten red victory markings (via K Osuo)



immediately requested military aid and duly received some 255 aircraft (155 Polikarpov I-152s and I-15s), along with over 250 'volunteer' pilots and accompanying technicians. The infusion of Soviet aircraft and pilots was quickly noted by Japanese navy pilots flying the A5M 'Claudes', and they soon reported increased resistance and aggressiveness on the part of their opposition.

However, by January 1938 the CAF had lost much of its aircraft in mêlées with the JNAF, whilst the JAAF's Ki-10's had also proved to be

far superior to the CAF's American Hawks, Russian I-15s and British Gladiators. The darkening war clouds over Europe also forced the Soviet Union to cut back on aircraft shipments to China, thus accelerating the demise of the CAF as a viable force.

Despite the increasing lack of targets, Lt Kosuke Kawahara of the 64th Sentai achieved his fifth kill on 8 March 1938 to duly become the first ever JAAF 'ace' (in the Western tradition). While returning from a bomber escort mission to Sian, the 1st Chutai had encountered four I-15s, and Kawahara – who had claimed four victories from previous encounters – shot down one while his comrades finished off the rest.

With the introduction of the new monoplane Nakajima Ki-27 'Nate' in March 1938, the standard Ki-10 fighter was retired – this signalled an end to the biplane era within the JAAF. The 64th Sentai received its first Ki-27s on 3 April and immediately commenced training. Eager to test the new aircraft under combat conditions, the day of reckoning arrived just seven days later when 18 'Nates' tangled with an estimated 30 enemy aircraft and shot down 24, losing just two of their own in reply! Capt Tateo Kato, who destroyed three CAF aircraft, could not praise the new fighter enough, and shortly after the Ki-27's introduction to the frontline, what was left of Chinese airpower was decisively crushed.

NOMONHAN (KHALKIN GOL)

In May 1939 an ill-defined border between Manchuria and Outer Mongolia led to the Nomonhan (Khalkin Gol) Incident, which turned out to be yet another local skirmish that quickly flared into an undeclared war. It started on 10 May 1939 when nomadic Mongolians crossed the Khalka River to pasture their flocks, but were in turn driven back across the river by Manchurian border guards. The next day, Mongolian cavalrymen crossed the river to attack the latter, and followed up this action 24 hours later with another armed raid. The audacity of the Mongolians infuriated the leaders of the Kwantung Army, who rushed both infantry and air units to the Nomonhan Plains.

In response to this act by the Japanese, the Soviet Union was forced to enter the fray through the Soviet-Mongolian Mutual Assistance Pact of 1936 – the 1st Army was despatched to Tamsak-Bulak, which was about 60 miles south-west of Nomonhan in Mongolia itself. Along with the



infantry came two advanced fighter regiments (I-15 and I-16s) and single bomber and reconnaissance units.

The first blood shed in the aerial duel for the skies occurred on the evening of 20 May when three 'Nates' of the 24th Sentai, led by Lt Col Kojiro Matsumura, ran into two I-16s escorting an R-Z reconnaissance biplane on a sortie over the Khalka River. Following a short fight, the R-Z went down, although the Polikarpov fighters escaped. Two days later, the 'Nates' tangled with six I-16s and claimed three downed.

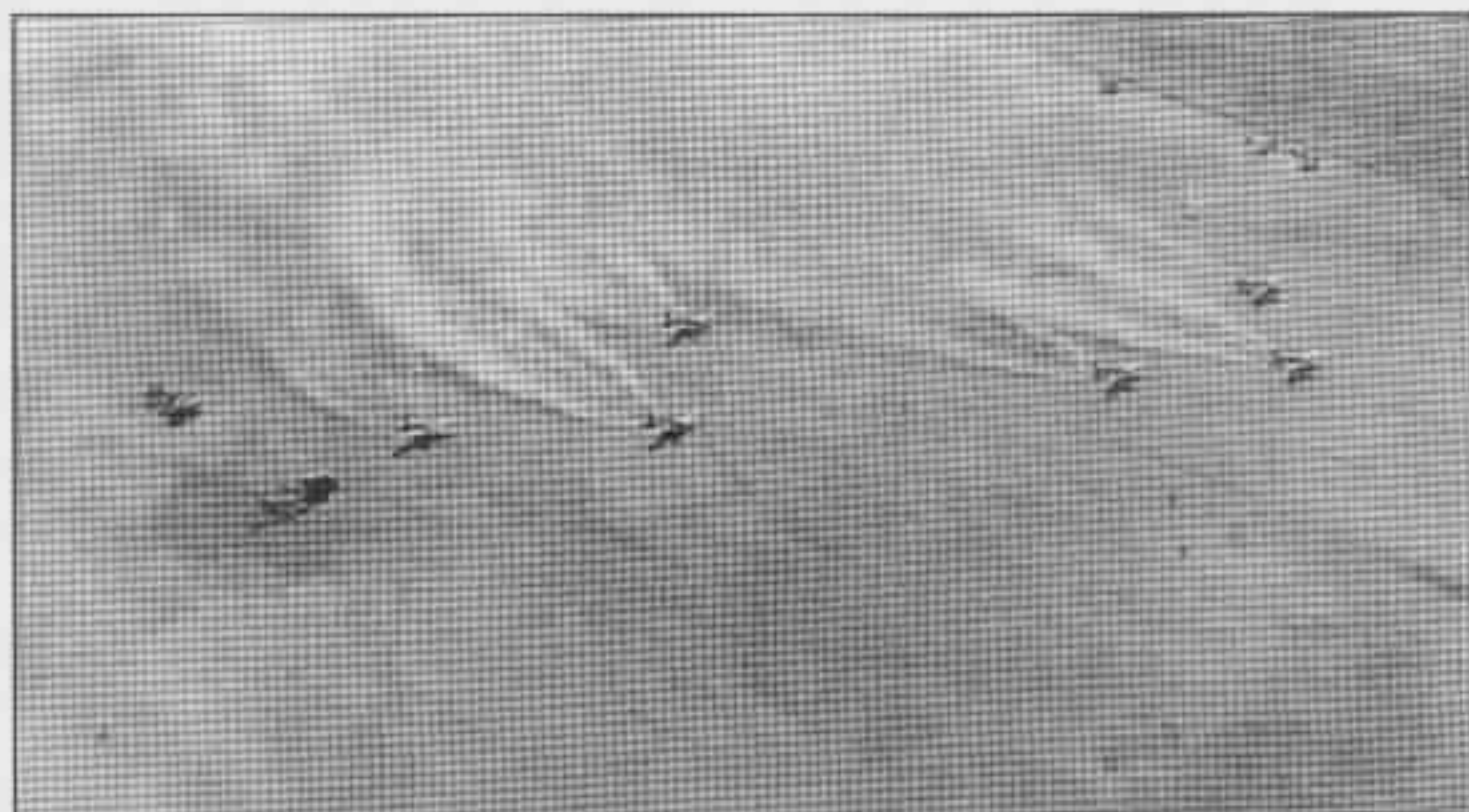
The 'tit for tat' skirmishes began to enlarge as more aircraft were sent to the disputed border area – these included five JAAF regiments, all equipped with new Ki-27s. The Soviet veterans who had fought the JNAF in China now found themselves duelling with the JAAF.

On 26 May the 11th Sentai received their baptism of fire in this conflict when nine 'Nates' bounced a formation of I-16s and reportedly destroyed nine of their number over Nomonhan. Two days later more than 60 Soviet fighters returned to seek their revenge, but the 11th Sentai scrambled 18 aircraft in response to this threat and claimed an incredible 42 victories for the loss of just one Ki-27. In reality the Soviets lost just ten aircraft, but the inflated claims by the Japanese had set the standard for subsequent actions.

On 22 June the biggest dogfight yet seen occurred when nearly 100

Nomonhan ace Cpl Katsuaki Kira (standing far left – 21 kills) and his fellow comrades of the 24th Sentai relax by a starter truck during the bloody summer of 1939
(via Y Izawa)

64th Sentai Ki-27s scramble for combat against the Soviets during mid-1939. The flat features of the Nomonhan Plain made take-off and landings easy, and pilots from both sides frequently landed to pick up downed comrades (via Y Izawa)





Another view of the 64th Sentai operating from Manchurian territory during the Nomonhan Incident. These 'airfields' were always temporary in nature, with all personnel (officers and ratings alike) quartered in tents. Aircraft maintenance was also performed entirely in the open, but thanks to the 'Nate's' rugged construction this posed few problems to JAAF groundcrews (via Y Izawa)

The 2nd Chutai of the 11th Sentai pose for a group photo in July 1939 during the height of the war with the Soviets (via K Osuo)



Soviet fighters crossed the Khalka River into Manchurian territory. The 24th Sentai could only muster 18 fighters in response, but during a series of running dogfights the handful of Japanese pilots claimed 47 victories for the loss of five of their own. The Soviets, on the other hand, claimed that they had lost only 11 aircraft, and destroyed 31 Japanese fighters!

While the Soviet-Mongolian ground forces fought the Japanese Kwantung Army along the Khalka River, tremendous air battles raged overhead. Acts of heroism were observed on both sides as pilots landed their fighters on the flat plains to rescue downed comrades. An example of this occurred on 26 June when the commander of the Soviet's 70th IAP fighter regiment, Maj V M Zabaluev, parachuted from his burning I-16 over Manchurian territory. His deputy, Maj Sergei Gritsevets, landed his aircraft as Japanese infantrymen advanced, and once his commander was safely sitting on his lap, took off in a hail of small arms fire.

Due to the continuing Soviet-Mongolian air offensive into Manchurian territory, the Japanese decided to escalate the air war by attacking targets across the Khalka River. During the dawn hours of 27 June, 104 aircraft of the 2nd Hikodan crossed into Mongolian territory to bomb bases at Tamsak-Bulak. As Japanese bombers blasted the airfield, Soviet fighters scrambled to do battle. What followed was an intense 30-minute dogfight involving over 150 aircraft which mesmerised troops watching the spectacle from the ground. When the bombers completed their task, the escort fighters broke off combat and accompanied the 'heavies' across the border. The Japanese lost two fighters and three bombers. Thanks to the skill of the JAAF fighter pilots, only One Type 97 bomber was forced to make an emergency landing (due to engine problems) in enemy territory, and even then another bomber landed and picked up the entire crew!

The month of July saw the heaviest fighting of the 129-day border skirmish. Soviet I-153s were mauled by the 'Nates', and their headquarters subsequently concluded that the era of biplane warfare was now well and truly over. In response to mounting losses, the Soviets now began to change their tactics, staging 'hit and run' raids with their I-16s across the

border – their pilots had been warned not to dogfight with the 'Nates'. The newer *Tip* 12 and 17 models of the I-16 employed heavier armament, including ShVAK 20 mm cannon, as well as armour-plating to protect the pilot.

By August the JAAF began to experience fewer claims and more pilot casualties, and it was rapidly determined that the enemy had



The first monoplane fighter of the JAAF, the 'Nate' was armed with two 7.7 mm machine guns in the upper fuselage forward decking and could achieve a maximum speed of 292 mph at 11,480 ft. This allowed the Nakajima to more than stand its ground against the Soviet I-16, although it lacked the latter's fire-power and armour protection. However, these deficiencies were more than compensated for by the 'Nate's' unrivalled manoeuvrability, which Japanese pilots preferred in dogfighting to cannons or armour plating. This Ki-27 sports the red cowling and eagle insignia of the 1st Chutai of the 64th Sentai, and is seen here with Sgt Shigeru Takuwa at the controls (*via Maru*)

negotiations were being conducted behind closed doors the combatants continued the fighting. The last aerial action of this incident occurred on 15 September when the 1st, 11th, 24th, 59th, and 64th Sentais were engaged in heavy combat with Soviet fighters. The following day a truce was signed, and peace returned to the border region.

Both sides made tremendous claims and minimised their losses. The Soviets believed that they had destroyed over 650 Japanese aircraft (actual documented losses put the figure at 162), whilst the Japanese claimed that they had shot down 1162 Soviet aircraft and destroyed a further 98 on the ground – the latter lost 207 aeroplanes as a result of combat. The top JAAF ace of the conflict was WO Hiromichi Shinohara, who claimed 58 victories, whilst his counterpart on the Soviet side was Maj Sergei Ivanovich Gritsevets of 70th IAP with 40+ victories.

The combat experiences gained in this 'dress rehearsal' for World War 2 gave the JAAF fighter pilots a valuable insight into their strengths and weaknesses. They now believed that speed was essential if the opponent avoided close-quarter dogfighting. In respect to their own aircraft, pilots realised that the advent of better armed, and armoured, enemy fighters, made their rifle-calibre armament virtually useless, whilst the lack of self-sealing fuel tanks in the 'Nate' made the Nakajima particularly vulnerable to cannon fire – their radio equipment was also virtually useless. While the pilots' criticisms were taken seriously by aircraft designers at the time, what they would eventually receive to replace the 'Nate' some two years later (the Nakajima Ki-43 *Hayabusa*, code-named 'Oscar') tended to indicate otherwise.

Master Sergeant Bunji Yoshiyama

One of the toughest JAAF pilots to emerge from the Nomonhan Incident was Bunji Yoshiyama, a native of Kagoshima Prefecture in Japan. He was born in 1916 and dropped out of Merchant Marine School to try his luck with the JAAF. He graduated from flight training in November 1934, and was eventually posted to the 11th Sentai at Harbin, Manchuria.

On 28 May 1939 more than 60 Soviet I-152s and I-16 fighters crossed the Khalka River into Manchurian territory, led by Maj V M Zabaluev. Smarting from their losses two days earlier, the Soviets were anxious for a

realised the inferiority of their fighters when compared with the 'Nate', and were now employing better tactics. In addition, the small cadre of JAAF fighter pilots in Manchuria had also started to succumb to battle fatigue after flying more than four missions per day for near on three months. The Japanese decided to end hostilities to save what was left of their battered ground forces, and the Soviets, stunned by the German invasion of Poland on 1 September, were only too eager to disengage. However, while peace

rematch, and the 11th Sentai duly rose to the challenge. Yoshiyama, flying with the 1st Chutai, shot down an I-152 in his first dogfight, while his squadron claimed 42 victories for a single loss – the pilot involved parachuted to safety.

On 27 June the JAAF crossed the Khalka River into Mongolian territory for the second time, despite being warned by Tokyo HQ not to take the offensive. Ignoring the High Command, the leaders of the Kwantung Army gave orders to launch a pre-emptive strike on the Soviet airfield at Tamsak-Bulak – MSgt Yoshiyama revelled in the day's action, downing four enemy fighters (three I-16s and an I-152). Prior to returning to base, he landed his aircraft east of Lake Byur and rescued MSgt Eisaku Suzuki.

On 25 July Yoshiyama destroyed three enemy fighters and again landed behind enemy lines, this time to pick up MSgt Shintaro Kajima of the 4th Chutai, who had parachuted down. As his score continued to climb so too did his reputation, and he often flew as second wingman to Capt Kenji Shimada, CO of the 1st Chutai.

In a wild dogfight on 20 August Yoshiyama damaged a Soviet fighter, which made an emergency landing. In an act of daring, or sheer foolishness, he landed beside his Soviet opponent and shot him dead. Yoshiyama then relieved him of his pistol and wristwatch and returned to Manchuria with them as souvenirs of their fateful encounter.

MSgt Bunji Yoshiyama disappeared on 15 September 1939 while on a bomber escort mission to attack Soviet airfields east of Lake Byur – the next day the armistice was signed. At the time of his death he had flown 90 missions and achieved at least 20 victories, possibly 25.

Major Iwori Sakai

Iwori Sakai was one of the oldest operational fighter pilots of World War 2, and his greatest contribution to the JAAF during this period was as an instructor and test pilot. He was born in Gifu Prefecture in 1909, and originally trained as a civilian pilot at Tokorozawa. In 1928, he became an NCO pilot in the reserves.

Cpl Sakai performed his military duties firstly in Korea and then Shantung, in China. He then returned to Japan and became an assistant instructor at the Akeno Fighter School. He entered the Army Academy in 1932 and graduated the following year, attaining a second lieutenant's commission. He then continued his teaching at Akeno and also at Tokorozawa.

When the China War started in July 1937, the Japanese rushed troops and aircraft into the northern part of the country. Sakai's baptism of fire took place on 11 March 1938 during an attack over Sian, and exactly two weeks later he shot down his first enemy aircraft – an I-15. On 10 April, he claimed three more, followed by another on 20 May.

By the time the Nomonhan Incident started in May 1939, Capt Sakai was flying with the 2nd Chutai in the 64th Sentai, and when the CO (a Capt Anzai) of the former was killed on 1 September, he became the new commander.

Toward the later part of this conflict, Japanese pilot casualties started to increase. He recalled, 'I had to fly four to six missions a day and I was so greatly fatigued that often I could barely see to land my plane. The enemy planes came over like a black cloud, and our losses were very heavy'. Sakai



Maj Iwori Sakai was a noted instructor and test pilot, as well as being a 15-kill veteran of the Nomonhan Incident. Many surviving JAAF pilots owed their lives to his training methods (via Maru)

flew a record seven missions in one day, and once came back with over 50 bullet holes in his fighter.

At the end of hostilities on the Nomonhan plains, Capt Sakai was transferred to Seoul, Korea, where he trained his men in the 'Sakai Method', using the latest American and British fighter tactics. In July 1941 he returned to the Akeno Fighter School, where his subsequent teachings influenced many future JAAF aces, including Maj Yohei Hinoki.

By March 1942 Sakai had attained the rank of major and he became involved in testing the new Ki-61 *Hien* ('Tony'). He considered this machine to be the equal second best fighter of the JAAF, along with the standard 'Oscar', from 1943 to the end of the war – he reserved top honors for the Ki-84 *Hayate* ('Frank'). When B-29s started to raid the homeland, he commanded an air defence unit and battled the Superfortresses. In the late stages of the war he test flew the Ki-100 *Goshikisen* and was favourably impressed, but it arrived too late to make any difference to the final outcome of the conflict.

At the end of the war Maj Sakai's personal victory tally stood at 15 (all Soviet aircraft), and he had flown a total of over 5000 hours in 50 different aircraft types.

Major Jyozo Iwahashi

A career military officer who became a distinguished fighter/leader in World War 2, Jyozo Iwahashi was born in Wakayama Prefecture, Japan, in 1912. He graduated from the 45th term of the Army Military Academy in July 1933, and was duly commissioned as a second lieutenant. He received flight training at Tokorozawa and Akeno.

At the time of the Nomonhan Incident Iwahashi was squadron leader of the 4th Chutai/11th Sentai, then based at Harbin, Manchuria. He did not participate in the initial fighting, and only became involved in the second phase which erupted in June. His first victories came on the 24th of that month when he claimed two enemy fighters shot down.

Due to Iwahashi's leadership skills, the 4th Chutai had gained over 100 victories by the time of the armistice, but because of his disdain for the Japanese media, and his refusal to permit reporters to interview him, much of his success went unrecorded. Iwahashi claimed 20 victories at Nomonhan, and was subsequently awarded the 4th Grade Order of Merit for distinguished service.

He returned to Japan to become an instructor at Akeno, before assuming the role of test pilot. As the war situation deteriorated, the JAAF's eagerness to bring the new Ki-84 into service led Iwahashi to head the inspection department which was to evaluate the new Nakajima fighter.

He was subsequently appointed commander of the newly-created 22nd Sentai on 5 March 1944, this unit being the first unit in the JAAF to receive the 'Frank'. After a brief period of familiarisation training, the sentai was ordered to central China for combat, Iwahashi flying into Hankow with 40 Ki-84s on 24 August.

Four days after arriving in-theatre, the 22nd Sentai engaged in its first combat at Yochow when it tangled with P-40Ns from several provisional squadrons of the Chinese-American Composite Wing and the USAAF's



Due to his loathing of the Japanese press, the exploits of 20-kill Nomonhan ace Jyozo Iwahashi went largely unreported during 1939. He served as squadron leader of the 4th Chutai, within the crack 11th Sentai, during the scored phase of the conflict, and later became an instructor and then a test pilot (via Maru)

118th TRS/23rd FG. Maj Iwahashi claimed one P-40 shot down.

The following month, Iwahashi and some of his men began intercepting B-29s on their way to Japan from their Chinese bases. On 21 September 1944 they were ordered to attack Xian (Sian) Airfield, and the major and his wingman strafed enemy fighters as they were taking off until the former was hit by ground fire. Iwahashi then dove his aircraft into the ground and was killed, one source claiming that he rammed a P-47. At the time of his death he had scored over 21 kills, and was subsequently promoted two ranks posthumously to lieutenant colonel.

Second Lieutenant Masatoshi Masuzawa

Masatoshi Masuzawa was one of the more colourful characters within the JAAF, comparable to the US Marine Corps' legendary ace Maj Gregory 'Pappy' Boyington. A tenacious fighter pilot who took extreme risks, and exuded an aura of invincibility, his only weakness was alcohol. Indeed, it was said that he had fought while in a drunken stupor, which was an incredible feat if true. Masuzawa was the stuff of legends.

He was born in Miyagi Prefecture in 1915, and like many of his comrades, as soon as he was old enough enlisted in the army and began his career as a common infantryman. Realising that fighter pilots were admired and treated better than foot soldiers, Masuzawa transferred to the Kumagaya Flying School and then graduated in February 1938 to fighter training at Akeno.

At the time of the Nomonhan Incident Masuzawa was a member of the 1st Sentai. He scored his first victory over Tamsak-Bulak, in Mongolian territory, on 27 June, and by the end of hostilities in September had recorded 12 kills. His dogfighting technique was simple and effective – charge into the enemy boldly, scatter them, and then pick them off. His aircraft received many hits through the employment of this tactic, but Masuzawa lived a charmed life.

After the Nomanhan Incident, the 1st Sentai was based near Harbin, in Manchuria, until November 1941. On the opening day of the Pacific War, the air group escorted a convoy of ships southward bound for the Malayan campaign. Prior to their departure for Rabaul, New Britain, in January 1943, they also saw action over French Indochina.

WO Masuzawa flew against the

Shown here soon after the Nomonhan Incident, 1st Sentai ace 2Lt Masatoshi Masuzawa (centre) lived a charmed life. He took extreme risks and returned alive every time, downing 12 Soviet aircraft in 1939 (via Y Izawa)



Americans over New Guinea, operating from bases at Salamaua and Lae. On 22 June 1943 he was wounded in a dogfight with P-38s of the 80th Fighter Squadron over Salamaua, claiming one Lockheed fighter shot down before being hit and severely wounded himself – Masuzawa made a forced landing at Lae and was later sent back to Japan by hospital ship.

Whilst he remained hospitalised the war effort was deteriorating for Japan. The need for experienced flight instructors finally provided the grounded pilot with the chance to fly again, and in March 1944, Masuzawa was assigned to the 39th KFR (educational training squadron) at Yokoshiba Airfield, utilising Manchurian-built Ki-79 aircraft – a redesigned trainer variant of the Ki-27 'Nate'. During this time he trained dozens of pilots for *kamikaze* suicide operations.

On 16 February 1945 American carrier aircraft attacked Japanese airfields as part of a huge fighter sweep over the Chiba Peninsula and Tokyo areas – Task Force 58's assault was the first large-scale attack by the Americans on the Japanese homeland since the 1942 Doolittle Raid.

When reports of incoming enemy aircraft reached Yokoshiba, WO Masuzawa was one of 16 instructors and trainees to scramble in defence of the airfield. In aerial combat with F6F-5 Hellcats from VF-9 and VF-80, the peerless ace claimed one aircraft shot down, despite his Ki-79 being armed with just a solitary 7.7 mm machine gun! Almost all of his comrades were shot down, but Masuzawa returned alive.

He ended the war with a total of 15 aerial victories.

Second Lieutenant Shogo Saito

Shogo Saito gained fame as the 'King of Ramming Attacks' during the Nomonhan Incident. He was born in 1918 in the Aomori Prefecture of Japan. In 1935 he entered flight training at Tokorozawa and completed the course of fighter training at Akeno in November 1936.

When conflict on the Mongolian border erupted in May 1939, Saito was a member of the 24th Sentai at Hailar, Manchuria. On 24 May he claimed his first victories when he flew straight into a formation of Soviet I-152s over Byur Lake and downed two – he had taken off late and mistook the enemy aircraft for his own squadron-mates.

The first large dogfight of the Nomonhan Incident occurred on 22 June when over 100 Soviet aircraft twice crossed the Khalka River into Manchurian territory. The only Japanese sentai to oppose this raid was the 24th with 18 Ki-27s. MSgt Saito downed three enemy aircraft and forced one pilot to take to his parachute. When a further three Soviet fighters made emergency landings, he strafed and burned them.

As the combat swirled about him Saito found himself in a dangerous predicament, for he had expended all of his ammunition. He decided to flee toward base, but was soon surrounded by eight I-16s. Knowing that he had no chance of surviving such odds, he decided to ram a Polikarpov fighter. He quickly singled out his victim, and whilst attempting to collide with the Soviet fighter his right wing tore off the upper portion of the fin and rudder of the I-16, and the hapless enemy pilot lost all control of his mount – Saito had scored his fourth aerial victory for the day. In the subsequent confusion he managed to make good his escape and somehow reach home.

On 21 July Saito single-handedly destroyed four enemy fighters and

2Lt Shogo Saito was given the title 'King of Ramming Attacks' following several memorable encounters with I-16s in the summer of 1939. He became the top ace in the 24th Sentai in Nomonhan by scoring 24 kills, although contrary to his nickname, he only scored one confirmed victory through physically ramming a Soviet aircraft (via Maru)



claimed one probable. He also saved the life of his commanding officer when he made a ramming attempt after again expending all of his ammunition. The tactic proved successful as the enemy pilot veered away at the unexpected assault.

Two days later the Soviets staged a massive bombing attack across the Khalka River, employing over 120 fighters to escort 23 SB-2 bombers. In the largest dogfight of the conflict, the Japanese were unsuccessful in stopping the raid – MSgt Saito downed one of the bombers, but was quickly attacked by a horde of fighters and received bullet wounds to his left leg. He extracted himself from the mêlée and returned to base, where he was briefly hospitalised.

By the time the ceasefire was implemented in mid-September Saito had achieved 25 victories to become the top ace in the 24th Sentai. He went on to serve with his unit in the Philippines at the outbreak of World War 2, then transferred to New Guinea, where he claimed a B-24 amongst several other kills – the exact count is unknown. He died on 2 July 1944 whilst fighting as an infantryman against US Forces on Hollandia.

Warrant Officer Hiromichi Shinohara

Hiromichi Shinohara was the top fighter pilot of the JAAF. He gained fame during the Nomonhan Incident where, in only three months of combat, he downed 58 enemy aircraft to earn him the title of 'Richtofen of the Orient'. No Air Force fighter pilot ever broke his record of achievement.

The future 'ace of aces' was born in 1913 to a farming family in Tochigi Prefecture. He enlisted in the Army's 27th Cavalry Regiment in 1931 and did his overseas duty in Manchuria, where he was a member of an expeditionary force sent to protect Japanese settlers, and their property, from Chinese bandits. In June 1933 Shinohara entered Tokorozawa Flying School and graduated in January 1934, being assigned to the 11th Sentai and posted to Harbin in Manchuria.

When the border skirmish with Soviet-Mongolian Forces erupted on 10 May 1939, Sgt Shinohara was ready. The little 'tit for tat' confrontations on the ground soon took on serious consequences as both sides moved up fighter reinforcement along the ill-defined border. Col Yujiro Noguchi, commanding the 11th Sentai, led 20 Ki-27 'Nates' from Harbin to forward bases near the Mongolian border on 24 May, and three days later Shinohara downed four I-16s in his first combat, which unfolded over the Khalka River. Less than 24 hours later he downed an L-Z reconnaissance aircraft and five I-15 fighters.

The unbroken Japanese record of 11 enemy fighters shot down in a single day was achieved by Shinohara on 27 June 1939 over Tamsak-Bulak. This day marked the first large-scale air offensive against the enemy over their own territory, and saw a force of over 100 Japanese aircraft cross the Khalka River and bomb airfields at Tamsak-Bulak. More than 150 aircraft engaged in an immense, confusing, mêlée for over half an hour. Shinohara's tactic was simple – he would charge into a formation of enemy fighters alone, scattering them and picking them off one by one with his superb marksmanship.

The 11th Sentai nearly lost Shinohara on 25 July when he was hit in combat, the peerless ace being forced to make an emergency landing after

In an incredible combat career that lasted just three months, Hiromichi Shinohara scored 58 victories – a total which included a JAAF record 11 kills in one day. His stunning success with the 11th Sentai earned him the title of 'Richtofen of the Orient' (via K Osuo)





WO Shinohara was shot down by an overwhelming number of I-16s on 27 August 1939, and these charred items were recovered from the burnt-out wreck of his Ki-27. They included a Mauser Model 1914 pistol (taken from one of his victims), a watch, brass identity disk, a can opener, key and other items (via K Osuo)

his fighter was struck in the left fuel tank. Luckily, his squadronmate, MSgt Iwasaki, landed his aircraft and rescued his comrade as Soviet tanks advanced on them.

WO Hiromichi Shinohara's luck finally ran out on the evening of 27 August 1939 – while escorting bombers he fell victim to a pursuing fighter, but not before he had shot down three of their number. Shinohara's last diary entry listed 55 victories, to which was added the three kills achieved on this final mission.

He received a posthumous promotion to second lieutenant.

Captain Kenji Shimada

Kenji Shimada had neither the appearance or the demeanour of a fighter pilot. He was overweight and mild mannered, with a gentle disposition. However, looks were most definitely deceiving in this case for Shimada went on to become one of the top-scoring JAAF aces of the Nomonhan Incident. Born in Tokyo in 1911, Shimada graduated from the Army Military Academy in July 1933 and entered the Tokorozawa Flying School. After completing various flight courses, he received further training at the Akeno Fighter School.

By March 1938 Shimada had been promoted to the rank captain and posted to the 11th Sentai as squadron leader of the 1st Chutai. He was stationed in Manchuria at the outbreak of the Nomonhan Incident, and moved his squadron to Hailar on the 24th of that month as the border skirmishes increased in intensity.

Capt Shimada's baptism of fire occurred three days later whilst leading a six-aircraft patrol over the Khalka River. His formation engaged nine Soviet I-16s, and he soon shot down three of them, whilst his comrades shared the remaining six. There was a lull in fighting after 28 May, and both sides used the time to both regroup and reassess the situation.

The border skirmish heated up again on 22 June, and from that day forward until the armistice in mid-September, Capt Shimada was engaged in regular combats. His 1st Chutai went on to score the highest number of kills in the air group, claiming over 180 enemy aircraft destroyed. Amongst his subordinates was ranking ace WO Hiromichi Shinohara – see previous entry.

On 15 September 1939 – the final day of fighting – Capt Shimada participated in a raid against Tamsak-Bulak. He was last seen engaged in aerial combat with I-16s, but following his failure to return to base the captain was declared killed in action. He received the customary one rank posthumous promotion to major.

Kenji Shimada's final score is unclear, and according to some Japanese historians he is credited with 27 aerial kills, whilst other sources say he claimed over 40 victories. Notwithstanding the confusion surrounding Shimada's own personal tally, his unit's outstanding achievement serves as a clear testament to his extraordinary leadership qualities.

CHINA- BURMA- INDIA THEATRE

When Japan went to war with the United States on 7 December 1941, the JAAF was at the pinnacle of its existence. The veterans of the China War and Nomonhan were confident in their ability to take on their American, British and Dutch counterparts. They believed at the beginning of World War 2 that the key to victory was to engage in close-quarter dogfighting, as well as to always retain sufficient speed in combat in order to chase down a fleeing oppo-

nent – the lessons from Nomonhan were fresh in their minds. Unfortunately, the Ki-43 *Hayabusa* (Peregrine Falcon), which was given the Allied codename of 'Oscar', did not fully meet their expectations.

In comparison to the Navy's lithe Mitsubishi A6M Zero fighter, the 'Oscar' was even smaller and lighter. Its wide chord 'butterfly' combat flaps bestowed upon the aircraft superior manoeuvrability when deployed in the heat of a dogfight, but its 950 hp Nakajima Ha-25 engine gave it a top speed of just 308 mph at 13,125 ft, which was appreciably slower than the Zero's 331 mph.

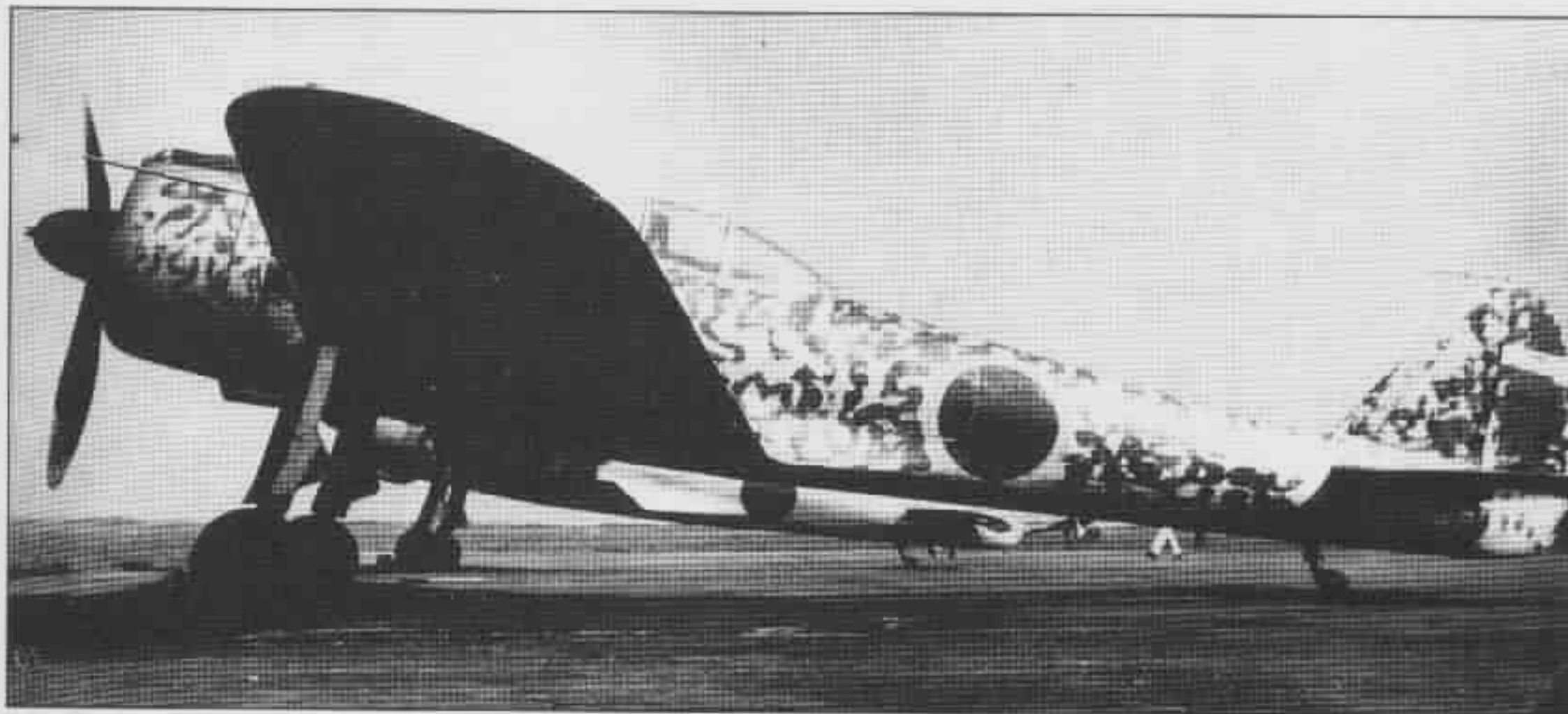
In terms of firepower, the *Hayabusa* was a lightweight, boasting just a pair of 7.7 mm machine guns in the nose – this paltry armament caused much consternation amongst veteran JAAF pilots, who had roundly criticised the Ki-43's predecessor, the Ki-27, for its lack of offensive 'punch' several years earlier. Later models carried two nose-mounted 12.7 mm guns, but Nakajima refused to adopt wing armament like that fitted to the Zero.

In preparation for the Malay invasion, the Army's 1st, 11th, 64th and 77th Sentais were tasked with ship escort duty for the landing forces, and of these four sentais, only the 64th was flying the new Ki-43-I-Otsu – they had received them in August 1941.

On 7 December 1941, whilst the Japanese Navy struck at Pearl Harbor, the JAAF found employment supporting the landings of the 25th Army in Malaya. The RAF, handicapped by a gross lack of modern combat aircraft, was quickly neutralised by the JAAF fighters, and once the latter had secured air superiority, the fall of Malaya was secured.



Although the USAAF's P-40 Warhawk was technically superior to the Ki-43 'Oscar', it was often pilot skill that determined the victory in favour of the JAAF pilot in the early war years. Here, a P-40E falls victim to an 'Oscar' attack in the early months of 1942 in the CBI (via Maru)



Seen soon after its arrival in China in mid-1943, this factory-fresh Ki-43-II-Otsu was funded through wartime public subscription – it was christened Aikoku ('Patriotism') Aircraft No 2068 (via Phil Jarrett)

By the end of January 1942 British and Commonwealth Forces had been forced to retreat into the protective enclave of Singapore island. From here the RAF managed to stage something of a fightback against overwhelming odds, its handful of war-weary Hawker Hurricane IIBs and Brewster Buffalos staving off defeat for a number of days until finally succumbing to the superior Japanese force.

The Hurricane had made a name for itself by helping to stem the Luftwaffe tide during the Battle of Britain in the summer of 1940. When it had entered service in late 1937 it had been the first RAF fighter capable of exceeding sustained speeds of 300 mph. Larger than the 'Oscar', and armed with an incredible (to JAAF pilots at least) eight Browning .303-in machine guns (four per wing), it easily outgunned its opposition. The Hurricane's maximum speed of 335 mph at 18,500 ft was also an unpleasant surprise to Japanese pilots.

The Brewster F2A Buffalo was the Hurricane's poor American cousin in Malaya, having been banished to the Far East due to its unsuitability for frontline use in Europe. Resembling a flying barrel, this aircraft

Wearing the distinctive red tail and fuselage stripes of the 2nd Chutai/25th Sentai, this Ki-43-II-Ko was the squadron commander's personal 'Oscar II'. It is seen parked between sorties at Hankow, in China, in 1944 (via Phil Jarrett)





The complex red tail marking on this Ki-61-I denotes that its employer is the 37th Flight Training Company, based at Matsuyama Airfield, on Formosa, in March 1944. This unit relied on a cadre of ex-frontline pilots to hone the skills of newly-arrived aircrew from Home Island-based basic flying training schools. Although strictly a training unit first and foremost, operational necessities often meant that instructors from the 37th would regularly be called upon to fly Home Defence sorties. Indeed, the company was also fully committed to the doomed defence of Okinawa in 1945 (via Phil Jarrett)

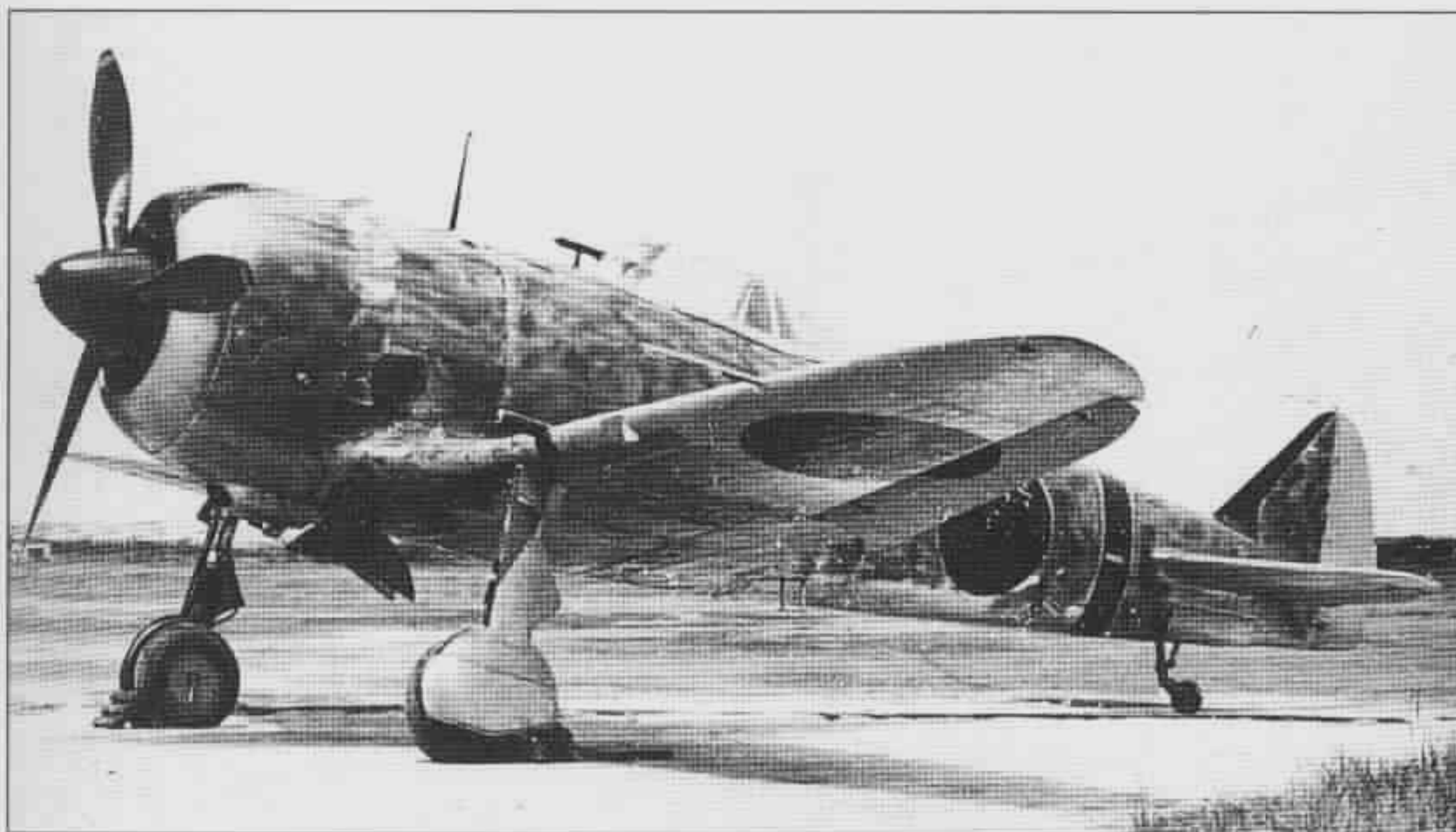
became the first monoplane fighter to enter US Navy service in June 1939. Although it possessed a maximum speed of 321 mph at 15,000 ft and was armed with four Colt .50-in machine guns (two in the nose and one in each wing), the stubby Buffalo was not successful in American service and most were sold to overseas customers. At the time of the Japanese invasion of Malaya, the Buffalo was the most numerous Allied fighter in the Far East, serving with squadrons of the RAF, Royal Australian and New Zealand Air Forces and the Royal Netherlands Indies Army Air Division. Sadly for its pilots it proved to be no match for the 'Oscar'.

The 64th Sentai engaged Hurricanes for the first time over Singapore on 20 January 1942, claiming five and two probables – RAF fighters continued to oppose the Japanese until Singapore fell on 15 February 1942. When Lt Gen A E Percival surrendered Singapore, it became the greatest British military disaster in history, with over 130,000 British and Commonwealth soldiers being taken prisoner.

With Singapore in their hands, the Japanese prepared to attack the vital oil refineries at Palembang in the Dutch East Indies. It was imperative for the Japanese to acquire these key targets intact in order to fuel their war

A pilot receives a haircut between sorties, much to the amusement of his comrades. The famous arrow insignia of the 64th Sentai can be seen on the Ki-43 in the background (via Maru)





effort as Japan itself was bereft of natural oil supplies. Fighters from the 59th and 64th Sentais played a key role in providing fighter escorts for bombers attacking Allied forces defending the refineries. RAF Hurricanes sent out to repel the JAAF formations were quickly beaten back, and Japanese paratroopers subsequently captured Palembang on 15 February.

Following the capture of the oilfields, the Japanese invaded Java – there seemed to be no stopping the Japanese ‘juggernaut’. With the surrender of Allied Forces in the Dutch East Indies on 12 March, the Japanese had successfully achieved their major objectives of securing the oil reserves and raw materials of the region in just three months.

To the west, the Burma Campaign commenced in conjunction with the Pearl Harbor raid and the Malayan invasion, the Japanese Army’s goal being to cut off the vital Burma Road, which fed Allied war supplies to the beleaguered Chinese Army. It was in Burma that the 50th and 64th Sentais gained fame, their pilots flying both ground support missions and combat fighter patrols against RAF Hurricanes and Mohawks. They also ran into the legendary American Volunteer Group (AVG), better known as the ‘Flying Tigers’.

The AVG came into being through the efforts of then Capt Claire Chennault, a former US Army Air Corps fighter pilot now working for the Chinese Air Force. He recruited 100 American pilots from the various branches of the military with promises of adventure and bonuses. Three squadrons were raised and they began operating in Burma in September 1941.

The ‘Flying Tigers’ claimed their first victories on 20 December south-east of their base at Kunming, China, a dozen ex-RAF/RCAF P-40Bs intercepting ten JAAF bombers and downing three for the loss of one of their own. Pushed back into Burma following the Japanese invasion, they subsequently flew with great bravery in the defence of Rangoon, but as with their RAF brethren, limited resources saw them fail in their efforts to stop the enemy advance.

This distinctively dappled Ki-44-II-Otsu was regularly flown by the CO of the 2nd Chutai within the 85th Sentai in 1942/43. It is seen here at Jogai Airfield, in Nanking, in the summer of 1943 (via Phil Jarrett)

Capt Hideaki Inayama (at least five kills) was a seasoned veteran of the 87th Sentai in the CBI. He fought British Fleet Air Arm Corsairs, Hellcats and Avengers on 24 January 1945 over Sumatra, downing two of the latter in his Ki-44 (via H Sakaida)





Surrounded by a number of other JAAF fighters that have obviously been rendered unserviceable by either invading Allied forces or the fleeing Japanese, this seemingly intact Ki-84 'Frank' wears the distinctive tail marking of the 104th Sentai. This unit was formed at Heizan, in Manchoukuo, on 30 November 1944 in response to Soviet incursions along the Manchurian border with Mongolia (via Phil Jarrett)

When Japanese troops entered Rangoon on 8 March it was virtually deserted, its former defenders, realising the no-win situation they now faced, having given orders to abandon the city. The long retreat to India thus began. The 50th Sentai established their base at Mingaladon Airfield, in Rangoon, in mid-March, followed by the 1st and 64th Sentais in May. The Burma Road was cut later that year, forcing the Americans to fly in supplies to China over 'The Hump' (the Himalayas).

In July 1942 the AVG became a part of the USAAF's 14th Air Force, whilst its charismatic leader was given the rank of major general. They had fought early on in the war with very little support, yet had hampered the Japanese efforts in Burma. As commander of the 14th Air Force, Chennault was in a position to demand more aircraft and supplies, and despite his aggressive tactics alienating senior commanders in-theatre, he forced the Japanese to counter-attack with Operation *Ichi-Go* in 1944 – over a million battle-hardened Army troops were pulled out of Manchuria to try and destroy the 14th AF's bases in Hunan and Kwangsi Provinces.

The Americans were able to establish airfields in India in 1944 for their

The pilot performs engine power checks on his Ki-45-KAI-Otsu at an undisclosed base in Burma in 1944. This particular 'Nick' belongs to the 1st Chutai of the 21st Sentai (via Phil Jarrett)





One of the last surviving Manchoukuo Air Force Ki-27-Otsu-KAs dominates this view of a base near Mukden, in northern Manchuria, in mid-1945. Neatly lined up behind the weather-beaten 'Nate' are five camouflaged Ki-84s (via Jerry Scutts)

Maj Koki Kawamoto was a highly-experienced flight instructor and aerial tactician who had served with both the famous Akeno Fighter School and the 106th Flight School in Formosa prior to seeing combat in late 1943. Due to his vast tactical experience, Kawamoto rose rapidly through the ranks of the Ki-43-equipped 50th Sentai as the unit fought defensive battles over northern Burma and French Indochina. Following the death in combat of sentai leader Maj Tatsujiro Fujii in April 1945, Kawamoto took charge of the 50th and led it through to the end of the war. He scored eight kills whilst in action, and was awarded the Bukosho (Medal of Honor, B Class) on 10 June 1945 at 5th Air Division HQ in Phnom Penh, Cambodia, by Lt Gen Takeshi Hattori (via K Kawamoto)

B-29s, the idea being to get their aircraft and supplies into China for the purpose of eventually bombing the Japanese mainland. The 58th Bomb Wing was the first to succeed in this endeavour on 15/16 June 1944, its B-29s flying from China against industrial targets on the northern coast of Kyushu. They would also bomb targets in Bangkok, Formosa, Singapore, Saigon and Manchuria as the war progressed.

Despite the success of the 'air bridge' into China, the Americans wanted to open up the Burma Road, but the British lacked the equipment and manpower to get this job done. Finally, in late 1944 Allied troops broke out from their base in Assam, India, and plowed forward down the Burma Road, with engineers at the vanguard paving the way. By February 1945 the British had linked up with the Burma Road at Lashio.



The see-saw battles between Anglo-Chinese forces and the Japanese continued to rage in the skies over China until the war ended in August 1945. Throughout this time, when Gen Chiang Kai-Shek's CAF was not fighting the Japanese it was battling the Communists. This bitter feud characterised the political infighting that raged amongst key Allied personnel on the China-Burma-India front throughout the war, the end result of which was unnecessary casualties, delays in instigating offensive operations against the real enemy and the gross waste of scarce supplies.

Warrant Officer Bunichi Yamaguchi

It was considered most difficult for a pilot in the lightly-armed Ki-43 *Hayabusa* to single-handedly down a B-24 Liberator, but WO Bunichi Yamaguchi managed to destroy six and live to tell the tale!

This remarkable pilot was born in 1918 in Miyazaki Prefecture, Japan, and he joined the Army in 1936. Once he had completed flight courses in 1940, Yamaguchi was posted to the 1st Chutai of the 11th Sentai on the China front. He participated in the Malay operations at the start of the war, and although his unit intercepted RAF Blenheim bombers over Palembang in the early months of 1942, Yamaguchi failed to see any combat.

In April of that year the 204th Sentai was formed at Chinsei, Manchuria, from elements of various sentais, including the 11th – Yamaguchi joined the new unit and stayed with it until the end of the war. He arrived at Mingaladon Airfield in October 1943 and flew both air defence and offensive sorties. He finally claimed his first victory – a USAAF P-40 – on 22 December 1943 over Kunming, China.

WO Yamaguchi's most notable combat occurred on the night of 29 February 1944 when a pair of 'Oscars', flown by Yamaguchi and 2Lt Hiroshi Takiguchi, intercepted a formation of USAAF B-24s. They claimed two shot down, plus another pair as probables.

Lt Gen Noboru Tazoe, CO of the 5th Air Division, presented a citation to the two pilots, which read in part, '... (they) engaged in battle with 10+ Consolidated B-24s which raided Rangoon during the night of 29 February 1944. They took off in an emergency and were able to fight the enemy, taking advantage of the aerial searchlights which illuminated the aircraft. Both of our fighters were manoeuvred by our pilots to take full advantage of the capabilities of the aircraft. In a matter of seconds, two enemy aircraft were positively shot down into the ground and in addition, two more aircraft were severely damaged ... Each of the aircraft flown by Takiguchi and Yamaguchi seriously damaged the enemy tactics employed, and raised the morale of friendly forces. In addition, they created a magnificent impression on the officials and people of Burma. With their outstanding spirit and determination to ensure that each attack resulted in a certain target being shot down, tradition was magnificently exemplified by these two individuals ...'

The news of the daring attack circulated in the CBI and Yamaguchi's fame began to spread. In August 1944 he moved to Thailand, but the 204th Sentai was soon sent to Manila when the Philippines was threatened by American Forces. The unit was badly mauled by marauding USAAF and US Navy fighters within days of its arrival, and was duly forced to withdraw to Japan where its survivors tried to rebuild the sentai. By early 1945 the 204th had assembled a sufficient number of pilots and machines to participate in the defence of Okinawa, and WO Yamaguchi was heavily involved in a number of costly actions over the islands.

The spring of that year found Japanese forces preparing for the final onslaught as the Allies closed in around the Home Islands. Units were ordered to minimise combat missions in order to save their aircraft for a *kamikaze* suicide blitz, and this directive effectively saw the grounding of Yamaguchi and the remnants of the 204th Sentai until VJ-Day.



Sgt Bunichi Yamaguchi poses in front of an 11th Sentai Ki-27 in early 1941. This remarkable pilot went on to become a renowned heavy bomber specialist in the CBI, utilising 204th Sentai 'Oscars' to down six B-24s as part of a final tally of 19 kills (Y Izawa)

Bunichi Yamaguchi's final score of 19 victories was all the more impressive for the fact that it included six four-engined heavy bombers, all of which he shot down in the diminutive 'Oscar'. Yamaguchi passed away in 1992.

Master Sergeant Yukio Shimokawa

'Shimokawa, The Courageous Man' was the moniker given to Yukio Shimokawa by his fellow comrades in recognition of his bravery in combat. He hailed from Fukuoka Prefecture, and realised his boyhood dream of becoming a fighter pilot when he entered the Tokyo Army Flying School in April 1938.

By March 1941 Shimokawa had completed flight courses at Kumagaya and Tachiarai, and was assigned to the 5th Sentai. In January 1942 he was transferred to the 50th Sentai in Burma, but he returned to Japan four months later when the unit flew back to the Home Islands to exchange their Ki-27 'Nates' for Ki-43-I-Heis.

Once back in the frontline, and having engaged the RAF over the Burmese jungles, Shimokawa's reputation as a fearless fighter began to grow. On 24 December 1942, whilst pursuing a Blenheim bomber, he was wounded when shot through the thigh. Shimokawa's aircraft was also mortally damaged by the well-aimed burst, and with his *Hayabusa* burning fiercely, he bailed out. Despite the nature of his wounds, Shimokawa was able to return to his unit just a week later.

He was to see much action in 1943, the highlight being an action on 26 April when he claimed two enemy aircraft shot down over Lashio, Burma. However, Shimokawa's luck finally deserted him in the autumn when he was hit and blinded in one eye by the return fire from a B-24 – despite losing a considerable quantity of blood, he just managed to return to base. Shimokawa was immediately repatriated to Japan for hospitalisation.

The chronic shortage of experienced pilots by late 1944 saw a recuperated – but still medically unfit for combat – Shimokawa gain employment as a ferry pilot flying Oscars to Taiwan and the Philippines. The war finally caught up with the Burma veteran on 19 March 1945 when American carrier aircraft raided the Japanese naval base at Kure (southern Honshu). Shimokawa jumped into a Ki-84 'Frank' and, along with nine other pilots from Ozuki Airfield, scrambled into the air to repel the American fighters.

'Over Hiroshima at 6000 metres, we dove on enemy aircraft below. There must have been over 100 of them. In the following mêlée all my comrades were shot down and I was cornered near the mountains', he recounted some years later.

After shooting up two Hellcats, Shimokawa ran into the entire squadron strength of VF-17, whose F6F-5s had launched from USS *Hornet*. The 'Frank' pilot desperately tried to escape with the Grumman fighters in hot pursuit, flying headlong into a canyon. However, as he pulled up at its end to clear the mountains, Shimokawa presented an easy target for future six-kill ace Lt(jg) Tilman E Pool, who duly fired a long burst into the Japanese fighter – it exploded in flames just as its pilot bailed out.

'Just as my parachute opened it hooked up on a tree. I was burned, but I was OK', he remembered. Shimokawa had just provided the young

Texan with his third kill barely 24 hours after he had opened his account with a pair of Zekes over Kanoya Airfield.

In recognition for his actions on 19 March, and for several years of distinguished service, Shimokawa received a personal citation from Maj Gen Akira Horiuchi, Chief of the Army Aerial Transportation Department, on 28 July 1945. His citation read, 'Upon taking part in the battle on the Southern Front, you fought bravely in aerial combats, though you lost the sight of your left eye. You never abandoned your duty as an airman. You believed your special skill to fly is a gift. Since then, you have been doing your best; that is why your skill has accelerated greatly. You belonged to the transportation department. In March 1945, when you were ordered to transport planes to Taiwan, you happened to intercept US Navy fighters over Kyushu. You dashed into them and destroyed some of them; the others flew away. Since then, you belong to the Ninth Flying Unit and are in charge of education for students as an assistant instructor. You train them keenly and seriously. You overcame your handicap. You train them day and night. You have done your duty well. It can be said that your achievement is the result of your gift, but your spirit to do your duty and efforts are remarkable. You are the ideal airman. You are hereby commended'.

MSgt Yukio Shimokawa trained pilots for *kamikaze* attacks until the war ended. He claimed over 16 enemy aircraft destroyed.

Lieutenant Colonel Tateo Kato

Tateo Kato, who became the most celebrated and distinguished fighter-leader of the JAAF in World War 2, was born in 1904 after his father, Tet-suzo, was killed in the Russo-Japanese War.

There was no doubt that the young Kato would also follow a military career, and he duly graduated in the 37th Class of the Army Military Academy in July 1925. Flying had always fascinated this young cadet, so he soon elected to transfer from the infantry to the Army Air Force. Completing the flight course at Tokorozawa in May 1927, Kato was posted to the 6th Hiko Rentai (flight regiment) in Pyongyang, Korea. His flying skill in the Kawasaki Ko-4 biplane fighter (a licence-built Nieuport-Delage NiD 29) was shown to be so outstanding that he was awarded a gift by his superior, and allowed to perform a demonstration at graduation which left the audience enthralled.

Prior to overseas duty, Lt Kato worked as a flight instructor at the Tokorozawa and Akeno Flying Schools, and by February 1936, he had been promoted to lead a chutai within the 5th Hiko Rentai.

In July 1937 the China War began, and Capt Kato led the 1st Chutai, equipped with Ki-10 Type 95 'Perry' biplanes, from the 2nd Hiko Daitai (flight battalion) to the front. The Ki-10s quickly demonstrated their superiority over the Chinese Polikarpov I-15s, and the aggressive Japanese pilots dominated their opponents in aerial combat – Kato's best day came on 25 March 1938 when he shot down four I-15s. When the new Ki-27 'Nates' arrived the following month the Japanese became the undisputed masters of the sky. As an example of this, Capt Kato's 1st Chutai fought against eight I-15s on 10 April and the CO personally claimed three shot down. By May his unit had accounted for 39 enemy aircraft for the loss of only three Ki-27s – his chutai also received

Maj Tateo Kato led the 64th Sentai from April 1941 until his death in May 1942. One of the most highly-respected sentai leaders of the entire JAAF in World War 2, Kato had scored over 18 victories when he fell victim to an RAF Blenheim IV of No 60 Sqn over the Bay of Bengal. Despite the major's death, the lessons he had taught his unit lived on for the 64th Sentai became the most famous JAAF unit of the war (via Maru)





Assigned to the 2nd Hiko Daitai, the then Capt Tateo Kato poses by his Ki-10 Type 95 fighter during the China War in the spring of 1938 – he shot down four I-15s in a Ki-10 on 25 March 1938. Despite the obvious superiority of the Kawasaki biplane over the Chinese-manned Polikarpov fighters, the Ki-10 was replaced by the new monoplane Ki-27 'Nate' within a month of Kato's successful combat (via Maru)

two unit citations in this period. Kato returned to Japan that same month with nine victories, a score which made him the top ace of the conflict.

Prior to his appointment as commander of the 64th Sentai, Capt Kato entered the Army university and worked on the staff at headquarters. He visited Europe on assignment, and inspected the German Air Force.

When the Pacific War started, Maj Kato's group escorted naval vessels to Malaya. The 64th Sentai then became very active in the theatre, and under Kato's command they recorded over 260 aerial victories. He disallowed individual victory credits for the sake of teamwork, and led his men by example in the air – it was quite rare for an officer of his rank to fly routine combat missions.

Lt Col Tateo Kato was killed on 22 May 1942 when his fighter was hit by return fire from Flt Sgt 'Jock' McLuckie, the air-gunner in a No 60 Sqn Blenheim IV bomber that had been sent to attack Akyab Airfield on the Burmese coast. The lone bomber had originally been part of a formation of three Blenheims scheduled to set out from Dum Dum, in India, to hit the Japanese airfield, but due to technical problems only Z9808, flown by WO Huggard, had managed to reach the target. They hastily dropped their bombs at low-level and sped off out over the Bay of Bengal at wave-top height.

However, despite the element of surprise being firmly in their favour, the Blenheim crew had spotted a number of 64th Sentai Ki-43s scrambling after them as they overflowed Akyab. First off in pursuit of the daring raider was 10-kill ace Sgt Maj Yoshito Yasuda, who soon caught up with the Blenheim and dived in to attack. Fortunately for the three-man Blenheim crew (Sgt Jack Howitt was the third member, serving as navigator), their turret gunner in 'Jock' McLuckie proved to be a crack shot, despite having never before fired his guns in anger. He hit Yasuda's 'Oscar' in its first pass, and the JAAF pilot was forced to return to Akyab.

Capt Masuzo Otani then took up the attack, but he too fell victim to a well-aimed burst from the Vickers 'K' gun and had to retire back to Burma. Finally, after almost 30 minutes of constant attack, three Ki-43-I-Heis appeared on the scene, with Lt Col Tateo Kato in the lead fighter. This did not phase the brave McLuckie, however, and as Kato pulled up after making his first diving pass on the Blenheim, the gunner raked the *Hayabusa's* exposed belly with a long burst and the Ki-43 began to burn. Realising that he would never make it back to Akyab, Kato half-looped his stricken 'Oscar' and purposely dove into the sea – he had advised his pilots on numerous occasions in the past to perform just such a manoeuvre if hit badly over the water. The remaining two JAAF pilots immediately returned to Akyab to report the terrible news.

The Blenheim returned to India unscathed by the 'Oscars' attacks, and once British Intelligence had ascertained just who was flying the Ki-43 downed by McLuckie, No 60 Sqn received the following signal from Air Officer Commanding Burma, Air Vice-Marshal D F Stevenson, on 2 August 1942;

'Please convey my congratulations toward WO Huggard, Sgt Howitt and Sgt McLuckie on the successful action they fought against four enemy fighters which took place over Akyab on 22 May, and which resulted in Lt Col T A Keo Kato (*sic*), leader of the Japanese fighter force, being shot down.'

The death of the charismatic leader was a severe blow to the JAAF in particular, and to Japan as a whole. In recognition of his distinguished service, Tateo Kato was elevated two ranks posthumously to major general, and it was recorded at the time that he had achieved 18 aerial victories. Even today, his memory is kept alive by the popular song 'Kato Hayabusa Sentoki Tai' (Fighter Air Group Kato), sung by spirited businessmen both young and old.

Captain Yuki Yoshi Wakamatsu

Yuki Yoshi Wakamatsu, who became an accomplished fighter pilot in China, was one of the few veterans of the CBI to gain all of his victories without ever flying the *Hayabusa* – the JAAF's workhorse – in combat.

Born in Kagoshima Prefecture in 1911, Wakamatsu entered the 3rd Flying Regiment in 1930 as a volunteer, and graduated from the 41st term student piloting course in November 1932. After graduation, he worked at Tokorozawa and Kumagaya Flying Schools as an assistant instructor, before entering officers' flight school in May 1938 and graduating later that year as a second lieutenant.

By the autumn of 1939 the Nomonhan Incident was coming to a close, and by the time 2Lt Wakamatsu arrived at Hailar, in Manchuria, for duty with the 64th Sentai, the bloody skirmish had just two days to run before the ceasefire was declared – hence, he saw no combat.

With peace now secured on the northern border, Wakamatsu's unit moved south into China, and he served out his time there in rather uneventful fashion before returning in 1940 to Japan for further training at Akeno.

In May 1941, Wakamatsu was sent to the newly-organised 85th Sentai, which was still flying the Ki-27 'Nate' despite the fact that most other JAAF fighter units had upgraded to the modern *Hayabusa*. Promoted to captain, he was given command of the 2nd Chutai in January 1942, and he duly led his squadron down to southern China when the whole sentai was moved closer to the action. Here, Wakamatsu began to blossom into a skilled fighter pilot.

On 24 July 1943 he claimed two P-40s of the 74th FS/23rd FG over Kweilin for his first victories, followed on 20 August by two more Warhawks from the same unit over Canton. His main fighter opposition throughout this period came from the 74th, and he was involved in numerous heated engagements with them in 1944 whilst flying the Ki-44 *Shoki* over Canton, Hong Kong and Hankow.

In September of that year Capt Wakamatsu changed his mount to the Ki-84 *Hayate*, and in his very first combat in the new aircraft on 4 October over Wuchow he encountered P-51Bs of the 76th FS/23rd FG – Wakamatsu claimed two Mustangs destroyed.

On 18 December Gen Claire Chennault sent a massive air raid to strike at Hankow, 84 B-29s firebombing supply depots and other targets in the city, supported by Fourteenth Air Force B-24s and B-25s. Fighters from the 23rd FG and the Chinese-American Composite Wing provided bomber escort, plus struck at Japanese airfields in the area in order to catch enemy fighters landing to refuel between sorties.

One of the pilots to fall victim to these roving fighter strikes was Capt Wakamatsu, who took off from a satellite airfield outside of Wuchang in



Capt Yuki Yoshi Wakamatsu gained most of his 18+ victories flying Ki-44s with the 85th Sentai. He became something of a specialist against the P-51B/C in China, shooting down at least nine Mustangs prior to his death on 18 December 1944 (via Maru)

an attempt to re-engage the B-29s, but was quickly jumped by his old enemies from the 74th FS, led by five-kill ace Maj Phil Chapman. With his Ki-84's undercarriage barely retracted and still struggling to build up speed, Wakamatsu was surrounded by at least ten P-51Cs and blasted out of the sky.

Upon his death, Army HQ recommended that he be cited and promoted two ranks posthumously to lieutenant colonel. However, due to the confusion of war, the honours were never bestowed.

Capt Wakamatsu's aerial gunnery was exceptional, and it was accepted that he had shot down more than 18 enemy aircraft – all fighters – during his career. He became a specialist hunter of the P-51B/C, and it is believed that half of his total was made up of Mustangs.

A number of postwar historians have created a myth surrounding Wakamatsu's fighting ability, labelling him the 'Red-nosed Ace' who struck terror into the hearts of his opponents – his aircraft's spinner and tail were painted red. Credence is lent to this story by the fact that the Chinese government reputedly put a price on Wakamatsu's head, such was his skill in aerial combat. An ideal fighter leader, it was only fitting that he would emerge as a legendary figure after his death.

Captain Hiroshi Onozaki

Hiroshi Onozaki was born in 1917 in Tochigi Prefecture, Japan. He entered flight training at Kumagaya in the 3rd term Youth Flight Programme in February 1936, and as an outstanding trainee, received the presentation of a silver watch. After graduation, he was sent to the Akeno Fighter School for combat training.

During the Nomonhan Incident, Onozaki was transferred to the 59th Sentai in Manchuria, but he failed to see any action. Indeed, it wasn't until December 1941 that this young pilot was thrust into combat when, as a member of the 1st Chutai, he participated in the Malayan Campaign – his unit crossed the Gulf of Siam from French Indochina and strafed airfields at Kota Baharu on the north-eastern tip of Malaya.

Sgt Onozaki's first dogfight occurred over the skies of Kuala Lumpur on 21 December 1941 when he was credited with shooting down a Brewster Buffalo flown by Sgt K R Leys of No 453 Sqn, RAAF – other JAAF pilots from the 59th claimed three kills from this sortie, although only two Australian Buffalos were ever engaged, and Leys was the only casualty. The 'Oscar' pilots from this unit went on to attack targets over Malaya and Singapore, as well as Dutch and British fighters sent aloft to protect the oilfields at Palembang. Over Java, Onozaki added eight Hurricanes (from Nos 232 and 258 Sqns), a Blenheim IV (of No 211 Sqn, downed on 6 February) and a Ryan STM-2 trainer to his score, and thus become the top ace of the 59th Sentai.

In May MSgt Onozaki returned to the homeland, where he entered the Army Air Academy and duly graduated six months later as a second lieutenant. He subsequently returned to his unit in Java, where he commenced flying air defence duties around Timor Island. In January 1943 his flight shot down a USAAF B-25 which was part of a formation that had come to attack the Timorese capital of Dili.

On 20 June the JAAF launched a large attack on Port Darwin, in Australia, and the 59th Sentai, operating from Timor, sortied 22 'Oscars'



Capt Hiroshi Onozaki (seen here in late 1942 as a second lieutenant) became the top ace of the 59th Sentai. He exacted a heavy toll on the embattled RAF during the early months of 1942, downing eight Hurricanes and a Blenheim IV over Java (via Maru)

under the command of the CO, Maj Takeo Fukuda, in support of the raiders – 18 bombers from the 61st Sentai and a further nine from the 75th. The force was opposed by some 46 Spitfire LF VCs from No 1 Fighter Wing, RAAF, and in the bitter dogfight that ensued, Onozaki claimed to have destroyed two of the Australian fighters.

The following month his unit was ordered to New Guinea, where Japanese Army troops were struggling in the face of renewed Allied attacks, as well as the harsh tropical environment. They commenced operations from their bases at But, on the eastern coast of New Guinea, within days of arriving, and on 15 August escorted bombers sent to attack the formerly secret Allied airfield at Tsili Tsili (Fabua). The following day, when they returned to finish the job, Onozaki became embroiled in a series of running battles with P-38s from the 431st FS over Marilinan, south of Tsili Tsili. Although he claimed one Lightning downed, USAAF records have since revealed that no fighters were lost on this date. Two days later he was surrounded at low altitude by an estimated 20 P-38s from the same unit, and only managed to escape thanks to the unmatched manoeuvrability of his Ki-43 at tree-top height. The next day, he was evacuated to Rabaul due to a severe attack of dysentery.

Capt Onozaki returned to Japan to become an instructor at Tachiarai, and he ended the war with a victory tally of 14 enemy aircraft shot down.

Major Hideo Miyabe

As the last air group commander of the illustrious 64th Sentai, Hideo Miyabe was yet another great fighter leader of the JAAF. Born in Kumamoto Prefecture in January 1919, he entered the Army Air Officers' School and duly graduated in the 52nd Class in 1939.

During the early war years, Miyabe served both with the 5th Sentai and as a commander of a ward in the Army Air Officers' School. His eye for administrative detail and leadership led to his appointment as leader of the 2nd Chutai/64th Sentai in February 1943.

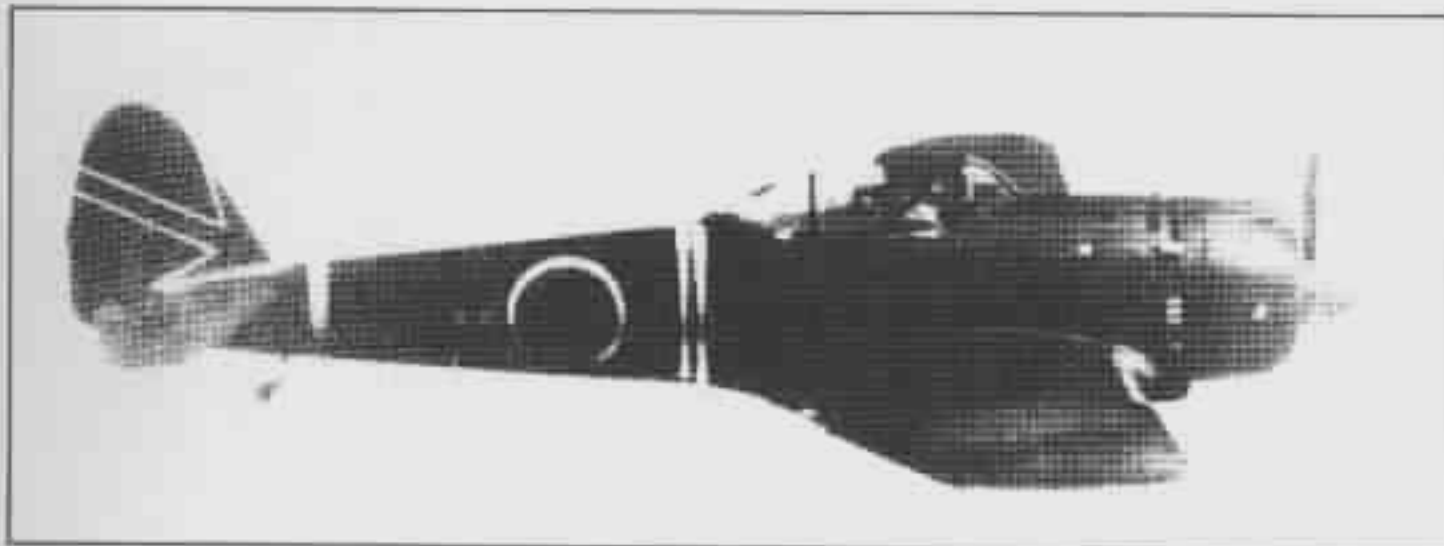
The harsh tropical environment of the CBI, coupled with a lack of supplies and aggressive enemy forces, served to progressively weaken his unit after March 1943. Miyabe believed that leaders should foster confidence in their subordinates by fighting from the front, and the rigorous training regimes he set for his young pilots were implemented in the belief that

such tests would someday perhaps save their lives. Miyabe was also hard on himself, for he took personal responsibility for the loss of any of his pilots, and blamed himself for unsuccessful operations.

He bears the distinction of being the first pilot to reportedly attack a B-29, for on 26 April 1944 Miyabe engaged B-29 (42-6330) of the 444th BG, which was flying supplies from China to India. Flying jointly with 'Oscars' from the 204th Sentai, he led the attack and reported machine gun strikes on

Maj Hideo Miyabe (far right) was the last CO of the famous 64th Sentai. He fostered teamwork, shunned publicity and would not even acknowledge his own victories (12+), nor the award of his Bukosho (via Maru)





This rare shot shows Capt Hideo Miyabe on patrol in his personal Ki-43-IIa in late 1944. The final mass-produced variant of the venerable 'Oscar' family, the IIa made its service debut with the 64th Sentai over Thailand in late October 1944 (via Maru)

one of the bomber's right engines. With their fuel running low, the Japanese pilots finally gave up the chase after the B-29 lost altitude – it was later claimed by the pilots as having been destroyed. The USAAF crew, however, reported no damage on their return, although they did claim to have shot one of their

assailants down – none were reported as having been lost according to JAAF records.

In April 1945 Maj Miyabe was appointed as the leader of the 64th Sentai, and on 10 June was awarded the Bukoshō by Lt Gen Takeshi Hattori of the 5th Air Division. His award citation states;

'The person mentioned herewith, since March 1943 as company commander, attacked airfields near Burma, co-operated with ground defence in a joint attack with competence and bravery – the enemy lost more than ten ships, more than 100 aircraft destroyed and several hundred motor vehicles. During this period, Maj Miyabe sank a large transport ship and damaged two others; he also damaged several small boats, shot down or damaged 30 aircraft. He also dropped supplies accurately, great deeds on every mission. He became a distinguished and remarkable air group commander of this traditionally famous and highly acclaimed unit.'

Miyabe did not appreciate his own commendation, and said of his award, 'The contents of the award scroll were somewhat exaggerated I must admit!'

He ended the war fighting in French Indochina, and returned to Japan where he became president of a large paper manufacturing company. While it is believed that he downed many enemy aircraft, he never acknowledged them – historians believe he scored more than 12 victories. The beloved leader of the 64th Sentai passed away in October 1978.

Major Yasuhiko Kuroe

Maj Yasuhiko Kuroe was the top scoring fighter pilot amongst the officers' group of the Army Military Academy. He was born in February 1918, the son of an army major, and following in his father's footsteps, the young Yasuhiko also joined up and subsequently graduated from the 50th Class of the Army Military Academy in June 1937. He elected to become a fighter pilot and entered flight training at Akeno.

Upon graduation from flight training, Kuroe was assigned to the 59th Sentai in November 1938 and transferred to Hankow Air Base, in central China. Experiencing a lull in the fighting at the time of his arrival, Kuroe joined other pilots of the unit in performing numerous training exercises with their new Ki-27 'Nates'. When the Mongolian border skirmish flared into a fully-blown war in 1939, the 59th was immediately dispatched to the Nomonhan Plateau. On the final day of fighting in mid-September, Kuroe claimed his first two victories in the shape of a pair of I-15s.

In 1941, 1Lt Kuroe returned to Japan and became a flight instructor at the Army Officers' Flight Academy, being promoted to the rank of captain in May. Four months later, nine prototypes of the new Ki-44 *Shoki*

'Tojo' fighter were assigned to the experimental 47th Independent Chutai for flight testing under combat conditions, and Capt Kuroe was duly placed in charge of the programme, flying the fighters to South-east Asia – French Indochina, Malaya and Burma. There were few opportunities for combat at this early stage of the war, however, but he still managed to down three Hurricanes of No 232 Sqn over Singapore, and other adjoining areas. Despite this success, Kuroe stated that the Ki-44 did not live up to his expectations, but the Nakajima fighter was nevertheless accepted into service.

With the American and British Forces making their presence felt in the CBI, the pressure was placed on the Army's 64th Sentai to keep them in check. Following his success with the Ki-44, Capt Kuroe was transferred to the unit and given command of the 3rd Chutai. After Lt Col Tateo Kato – the CO of the air group – was killed in May 1942, Kuroe was instrumental in keeping the sentai intact essentially through the sheer strength of his personality. Always an optimist, he had nerves of steel, a personable disposition and superior organisational skills, and it was with the 64th that Kuroe made a name for himself as the model fighter leader.

On 13 September 1943, Kuroe shot down a photo-recce F-5A (unarmed P-38) of the 9th Photo Squadron, its pilot, 1Lt Frank H Tilcock, remembering:

'I never saw my attackers. My first and only indication that I wasn't alone in the sky was when my instrument panel in my airplane disappeared. Fire and smoke poured into the cockpit.'

The American parachuted to safety, being captured three days later. Kuroe later wrote in his memoirs that he met Tilcock, who shook his hands and told him that he was downed on the day of his wedding anniversary! Frank Tilcock, who now resides in Florida, confirms that he was indeed shot down on this day.

'I met a lot of Jap officials who asked a lot of questions. Perhaps Kuroe was one of them?' he now ponders.

By this stage in the air war the RAF had drafted the Mosquito into action in the CBI, and the fighter-bomber was to plague the Japanese through to VJ-Day. Indeed, it was not until 2 November 1943 that an example of the seemingly invincible de Havilland aircraft was shot down, Capt Kuroe destroying PR IX DZ697 of No 684 Sqn, which was being flown on a photo-recce sortie to Rangoon by Flg Offs Fielding and Turton at the time. On 10 December Kuroe encountered another Mosquito from the same unit (an FB II this time) in the Rangoon area, and doggedly pursued it for over 40 minutes out over the sea.

A burst of machine gun fire finally damaged the aircraft's left engine, but the 'Oscar's' guns then jammed. However, undeterred by this turn of events, the Japanese veteran managed to bluff the British pilot (Sgt Boot, with Sgt Wilkins as his navigator) into turning back towards land. The Mosquito and 'Oscar' flew in formation back towards Kuroe's base, but when the latter motioned for Boot to land, the damaged aircraft clipped a tree and crashed in a ball of fire – 'I was very sorry for him', recalled Kuroe some years later.

In January 1944, he was recalled to Japan to become a test pilot with the Army Flight Inspection Department, his new assignment involving



Maj Yasuhiko Kuroe was the top scoring ace amongst the Army Academy graduates, ending the war with 51 kills. He was also the first JAAF pilot to down an RAF Mosquito – a No 684 Sqn PR IX – over Burma (via Maru)

the evaluation of both rockets and experimental high altitude twin-engined fighters, which were being designed to oppose B-29s. During one test flight on 25 March, Maj Kuroe claimed two Superfortresses destroyed whilst flying an experimental Kawasaki Ki-102 twin-engined high altitude fighter, which was armed with a single 37 mm cannon and a pair of 20 mm weapons. Although successful on this occasion, the Kawasaki design failed to reach the frontline in serious numbers due to incessant engine problems. Kuroe added two more B-29s to his kill list on the night of 23 May whilst flying an early-production Ki-84-I-Ko.

In rare recognition of his outstanding service, Kuroe was awarded a citation and a special bottle of sake (rice wine) by Lt Gen Kumaichi Teramoto of the Army Flight Inspection Department in front of 3000 men on 15 July 1945.

Maj Yasuhiko Kuroe ended the war with a score of 51 victories. During his career he had been shot down three times, wounded on three separate occasions and the aircraft he had flown in combat had been hit over 500 times by the enemy!

Kuroe's talents were not wasted when the war ended for he entered the Japan Self-Defense Air Force, where he commanded a jet fighter squadron and rose to the rank of general. On 5 December 1965 Gen Kuroe drowned while fishing off a beach.

Warrant Officer Yojiro Ofusa

Yojiro Ofusa was one of the great aces of the 50th Sentai in the CBI. Born in 1918 in Miyagi Prefecture, Japan, he had joined the Army in the mid-1930s, but unlike many of his peers, Ofusa had fought at Nomonhan as an infantryman. Although the Japanese ground troops suffered tremendous losses in the bitter conflict, their Air Force was reported by the local media to have enjoyed great successes against their Soviet counterparts. The young gunner was duly impressed by such propaganda, and decided that his future lay as a fighter pilot.

In June 1942 Ofusa entered the NCO flight training class, from which he duly graduated four months later and was assigned to an air group in French Indochina. Here, he underwent more training before being posted in January 1943 to the 50th Sentai in Burma.

He fought throughout that year until his luck finally ran out on 24 November 1943. Tackling a large formation of B-24s from the 7th BG over Meikuterra, Ofusa quickly claimed one Liberator, but was also hit by return fire from the stricken bomber. Forced to take to his parachute, Ofusa subsequently spent 41 days in hospital recuperating. Upon his recovery, he went straight back into combat and was forced down on four separate occasions, although he also tempered these minor setbacks by becoming one of the top scoring pilots in the air group.

Ofusa was awarded the Bukosho (B Class) on 10 June 1945 in Phnom Penh, Cambodia – at the time of his award, he had shot down 19 enemy aircraft, damaged another 21 and sunk a cruiser in the Akyab area of the Indian Ocean.

He ended the war on Formosa after his air group withdrew from French Indochina in July 1945. His score of 19 included five P-51s, two P-47s, four Hurricanes and a Spitfire. After the war, he changed his name to Higuchi and he now resides in his native prefecture.



WO Yojiro Ofusa proved that a lightly-armed Ki-43 in the hands of a skilled pilot could defeat technically superior opposition in the form of Mustangs, Thunderbolts and Spitfires – indeed, of his 19 kills, 12 were single-engined Allied fighters. He won the rare Bukosho for his exploits in the CBI (via Y Higuchi)

Master Sergeant Satoshi Anabuki

Despite being the top fighter pilot of the JAAF in World War 2, Satoshi Anabuki was not well known to the Japanese public during the war years – an ignorance equally shared by his Allied opponents. Nevertheless, within the JAAF, his exploits gained him notoriety as the 'Flower of the Youth Flyers'.

The son of a farming parents, Anabuki was born in 1921, and soon expressed a love for flying. He first joined the Army Youth Preparatory Flight Programme and entered the Tokyo Army Aviation School in April 1938. He received further training at Kumagaya and Tachiarai, and upon the completion of courses here in March 1941, was assigned to the 3rd Chutai of the 50th Sentai on Formosa in July.

On 7 December 1941 19-year-old Cpl Anabuki participated in attacks on the Philippines, his first combat taking the form of a pursuit attack against a B-17D. He scored his premier victory on 22 December when he downed a 17th Pursuit Squadron (PS) P-40E over Lingayen Gulf, the latter having just strafed Japanese naval vessels. After the invasion, the main force of the 50th Sentai shipped out to Burma, but Anabuki's chutai remained behind. Making the most of his extended stay, he downed two 17th PS P-40s over Limai on 9 February 1942, these Warhawks being amongst the last airworthy USAAF fighters left to protect the Philippines at the time.

In April Anabuki returned to Japan with his unit, the latter exchanging their obsolescent Ki-27s for new Ki-43-I-Hei *Hayabusas*. Fully equipped, they flew on to Burma in June and operated around Mingaladon Airfield on the outskirts of Rangoon.

It was in the CBI that the 'Boy Wonder' blossomed. Perhaps the best example of his skill occurred on 24 December 1942 when, after his aircraft was damaged during a bombing raid while taking off, he was forced to do battle with RAF Hurricanes with his landing gear extended. Despite this handicap, Anabuki succeeded in downing three of them – RAF losses reveal that only two Hurricane IIBs failed to return, however, one each from Nos 607 and 615 Sqns. The pilot of the former machine, Plt Off C D 'Chook' Fergusson, was thrown clear of his exploding aircraft when it blew apart just feet above a sand-bank in the Iwaraji River. Although badly burnt, he was to make a full recovery from his horrific injuries.

On 26 January 1943 Anabuki downed his first B-24. Ten months later on 8 October he was to repeat this success three times over when he downed a trio of Liberators, plus two of their Lightning escorts. One of his bomber kills was achieved by ramming the right fin assembly, and despite achieving 'ace in a day' status, he was wounded in the process and made to carry out a forced land-



The JAAF's 'Ace of Aces' in World War 2, MSgt Satoshi Anabuki is seen here posing in front of an 'Oscar' in late 1944. He is wearing the standard Air Force summer flight suit. His parachute harness is a Type 92, whilst the white identification label on the strapping itself reads 'MSgt Anabuki'. Despite being dressed in a summer suit, Anabuki is inexplicably wearing a winter flying helmet (via Maru)

Taken at the same time as the photo above, Anabuki strikes a typical fighter pilot's pose in between Akeno Fighter School Ki-43-Illas in late 1944. Note his bandaged left hand, which was the result of his 8 October 1944 combat with US Navy Hellcats (via Maru)



Lt Hinoki prepares to board his extremely weathered 64th Sentai Ki-43-1c in Malaya in 1942. Like many JAAF officer pilots, he would often carry his sword in his aircraft for good luck. Hinoki's flight helmet was a gift from his instructor, Nomonhan ace Maj Iwori Sakai (via Y Hinoki)



ing on a Burmese beach – he was rescued some three days later.

Anabuki's daring feat raised the morale of his air group, and personally brought him a number of awards. Gen Kawabe, commanding the Burma District Force, presented him with a Chinese poem which he had personally composed, whilst Gen On San, the Burmese Army commander, visited the wounded pilot in the hospital to pay his respects. Although not fully recovered, Anabuki insisted on returning to duty but was forbidden to fly.

In February 1944 he returned to Japan, where he became a valued instructor at the Akeno Fighter School. He was promoted to master sergeant in October, and while employed in the hazardous task of ferrying Ki-84 *Hayates* to the Philippines, engaged in several combats with US Navy Hellcats and managed to shoot down six of them. Anabuki then flew home defence duties until the end of the war, adding a single B-29 to his score.

MSgt Anabuki kept an elaborate diary during his career, in which he recorded 173 missions in Burma and 51 victories – 30 were officially recognised. Postwar historians have since pegged his tally at 39.

Anabuki subsequently joined the Self-Defense Air Force in the 1950s and flew helicopters. He is now retired.

Major Yohei Hinoki

One cannot talk about the exploits of the 64th Sentai without mentioning Tateo Kato (the air group commander) or Yohei Hinoki, the latter's combat experiences in the CBI and Japan rivalling those of Zero ace Saburo Sakai.

Hinoki was born in Tokushima Prefecture in 1919. He received his flight commission in June 1941 and was posted to the 64th Sentai, where he served in the Malayan campaign. Here, the young second lieutenant was coached by Nomonhan veteran, Capt Iwori Sakai, in the complex art of dogfighting.

On the opening day of the war Hinoki fought against No 34 Sqn Blenheim IVs, claiming a half-share in the destruction of one of the bombers. Assigned as wingman to Sentai commander Maj Tateo Kato, his job was to protect his commander at all costs. Opportunities to engage in free-for-all combat were therefore rather rare, but Hinoki did, nevertheless, manage to claim two No 238 Sqn Hurricane IIs shot down over Singapore on 31 January 1942.

On 10 April 1942 AVG P-40Cs clashed with the 64th Sentai over Loiwing, China, in a low altitude dogfight in the clouds. Hinoki became embroiled in a fierce tussle with 3rd AVG Sqn ace Flt Ldr Robert T Smith (eight kills). The *Hayabusa* pilot was seriously wounded in the left arm and buttocks during the clash, his parachute harness stopping a .50 cal round from lodging in his back – so badly shot up was the 'Oscar' that Smith claimed it as a probable when he returned to base, having also scored a confirmed kill during the sortie.

Despite having somehow escaped his attacker, Hinoki was disoriented and crazed with pain, and just wanted to crash his fighter into a mountain peak to end his suffering. Fortunately for him, he regained his senses and followed a river back to an air base in Thailand where, after an agonising two-hour flight, he effected a deadstick landing – his fuel supply was

completely exhausted by this stage Hinoki was hospitalised for a month.

On 25 November 1943 Hinoki may have become the first Japanese pilot to shoot down a P-51 (probably an A-36A) in the CBI. His flight was scrambled to intercept seven unidentified aircraft that had entered Burmese territory, and once in visual contact with the fighters, he rocked his wings at the lead machine in order to try and ascertain its origins. The question of identification was soon settled when Col Harry R Melton, Jr, (CO of the 311th Fighter-Bomber Group) fired at him! Hinoki replied by latching onto the tail of the colonel's aircraft and inflicting mortal damage to the Mustang as its pilot desperately attempted a 'Split-S' manoeuvre. Forced to take to his parachute, Col Melton, Jr, was soon captured upon landing.

Two days later the 311th returned in force, along with a number of B-24s, heading for targets in Insein. Hinoki claimed one P-51 and an escorting P-38, plus a Liberator confirmed and a second bomber as a probable – both came from the 308th BG. Whilst pursuing the B-24s as they fled the target area, he was attacked by a 530th FS P-51A flown by 2Lt Robert F Mulhollem (who would go on to become a five-kill ace).

During the course of the brief dogfight which ensued, Hinoki was struck by a .50 cal bullet which nearly severed his right leg, but once again the 'Oscar' ace managed to extricate himself from this predicament and make a successful landing – Mulhollem, meanwhile, claimed Hinoki as a probable, having already scored two definite 'Oscar' kills earlier in the sortie. Hinoki's leg was amputated soon after he landed, and he spent many months in the base hospital gaining sufficient strength in order to survive being shipped back to Japan.

Because of his invaluable combat experience, Hinoki became an instructor at the Akeno Fighter School. Outfitted with an artificial leg, he later went on to flying combat missions against B-29s and their escorts.

In the last major combat of his career, Maj Hinoki extracted revenge against the Mustang. On 16 July 1945 he was pitted against P-51Ds of the 506th FG over Ise (Nagoya) Bay, piloting a Ki-100 *Goshikisen*. He was forced to close to within 20 metres of his target due to a severely vibrating propeller which badly upset the accuracy of his aim. Capt John W Benbow of the 457th FS felt the full force of his mixed cannon and machine-gun armament, and his Mustang went down in a slow gliding turn, trailing smoke – Benbow was never seen again.

After the combat of 16 July, the 111th Sentai was formed with a mix of Ki-84s and Ki-100s, and Hinoki was assigned as the leader of the 2nd Daitai – it saw very little combat, however.

It is estimated that Maj Yohei Hinoki downed more than 12 enemy aircraft, and his varied combat experiences demonstrated that a skilled pilot in a lightly-armed fighter like the *Hayabusa* could destroy Hurricanes, Lightnings, Mustangs and even Liberators. A gentleman in every sense of the word, the 'Master Falcon' finally passed away in January 1991.

Warrant Officer Isamu Sasaki

Unlike many of the more famous JAAF fighter pilots of World War 2, Isamu Sasaki's extraordinary accomplishments have received very little recognition over the years.

Born in 1921 in Hiroshima Prefecture, he left technical school and



Isamu Sasaki, pictured here as a cadet at the Tokyo Army Aviation School in 1938, scored some 38 kills whilst flying Ki-43s and -84s with the 50th Sentai – a score which included the destruction of six B-29s. He was awarded the Bukosho for sustained distinguished service (via I Hirayama)

Sgt Moritsugu Kanai (standing) and his crew chief pose next to his 11th Sentai Ki-27 'Nate' in China in 1940. The writing on the fuselage reads 'Aikoku 437', denoting that the fighter had been 'purchased' and donated by a patriotic citizen or organisation (via Y Izawa)



joined the Tokyo Army Aviation School in April 1938. Upon graduation in March 1941, he was assigned to the 50th Sentai, based on Formosa.

On the first day of the Pacific War Sasaki took part in the invasion of the Philippines, his baptism of fire taking place on 10 December 1941 over Bigan Bay when he chased a B-17C that had made a surprise attack on the Japanese invasion fleet. He pursued the Boeing bomber towards the vicinity of Bagio, where Navy Zeroes took over the hunt.

In January 1942 Sasaki advanced into Thailand with his unit and scored his first victory over Rangoon. In the violent Burma Campaign he went on to achieve over 20 kills against fighters, as well as claiming to have destroyed more than a dozen larger aircraft. In April 1944 he returned to Japan to become an examiner of test pilots.

Sasaki's courage and elaborate skills were aptly demonstrated to the examination department on 25 May 1945 when, in a single night action against B-29s over Tokyo, he targeted the enemy by silhouetting them against the great fires below. He would then dive at his victim head-on – he shot down three Superfortresses in this fashion in a matter of minutes.

By the end of hostilities, Sasaki had destroyed six B-29s and damaged three others, bringing his total war claims to at least 38. For his actions against B-29s, allied with his distinguished record in Burma, Sasaki was awarded the Bukosho (Medal of Honour, B Class) and received a promotion to warrant officer.

After the war, Sasaki changed his name to Hirayama and joined the Japan Self-Defense Air Force. He is now retired, and resides in Hiroshima Prefecture.

Lieutenant Moritsugu Kanai

Moritsugu Kanai was one of the very few JAAF pilots in China to score consistently against the Americans throughout the later war years. Born in Yamanashi Prefecture in 1919, he joined the Youth Flying Corps of the Kumagaya Flying School in February 1937.

Kanai first saw action as a member of the 11th Sentai when posted to Manchuria during the Nomonhan Incident. As a pilot in the 1st Chutai, under the command of Capt Kenji Shimada, he often flew as wingman to

the top JAAF ace, Sgt Hiromichi Shinohara. By the end of hostilities, Cpl Kanai had scored seven victories.

The 11th Sentai subsequently operated in ground support missions in central China after transferring out of Manchuria, seeing very little aerial combat whilst performing this role. Kanai was then assigned to the 87th Sentai, and promoted to master sergeant, before entering the Army Officers' Flight School in December 1942. Commissioned as a second lieutenant upon graduation, Kanai was then posted to the 25th Sentai in China.

On 10 March 1944 2Lt Kanai opened his scoring in World War 2 when he shot down a P-38 of the 449th FS whilst flying an 'Oscar' over Anching. On 6 May, whilst tackling P-38s from the same unit over the Hankow area, his fighter was hit in the oil tank and barely managed to make it home. Once safely on the ground, he rushed over to another Ki-43 and resumed the fight – he subsequently claimed two P-38s destroyed! By the end of 1944, his tally stood at 19, which included a B-29.

Kanai's last assignment was in Korea, and by war's end he had increased his score to 32 victories – other published sources have pegged his tally at 26. After the war, Kanai joined the Japan Self-Defense Force. Sadly, he was killed in an accident in August 1972.

Captain Ryotaro Jobo

Ryotaro Jobo has been listed at one time or another in Japanese publications as having scored either 70 or 76 kills, and while his victory tally may be the topic of some conjecture, his accomplishments as a fighter pilot most certainly are not.

Jobo was born in 1916 in Shiga Prefecture. At the age of 18 he entered the Tokorozawa Army Flying School, and in January 1935 he graduated and was assigned to the 6th Flying Regiment at Pyongyang, in Korea. In January 1936 he graduated from the Akeno Fighter School, and in August 1937 Jobo joined the 9th Chutai and went to fight in the China War. One year later he became a member of the 64th Sentai.

When the latter unit was thrust into the aerial battles against Soviet-Mongolian forces at Nomonhan, Jobo soon proved his ability as a fighter pilot by scoring his first victory (an I-16) on 3 August 1939. Eleven days later he added another Polikarpov to his tally.

On 21 August the JAAF crossed the Khalka River to strike at Soviet bases at Tamsak-Bulak in an all-out attack. Over 50 Japanese heavy and light bombers and close support aircraft, protected by 88 Ki-27 'Nates', engaged more than 250 Soviet aircraft over a period of 13 hours. In the midst of the wild and confusing dogfights, Jobo managed to shoot down two I-16s, but was hit numerous times and suffered shrapnel wounds to his face.

By the time a ceasefire had been brokered between the Nomonhan protagonists in September 1939, Jobo had claimed 18 Soviet fighters shot down. From Nomohan, the 64th Sentai moved to southern China, and he returned to Japan in February 1940 and entered the Army Officers' Flight Academy – he graduated from here in July 1941. Jobo was assigned to the 33rd Sentai and posted back to southern China, where he fought until September 1943. While in-theatre he claimed two P-40s.

Lt Jobo went on to become a specialist against B-29s in the CBI, joining the 1st Field Reserve Squadron, which was equipped with Ki-43 *Hayabusa* and Ki-44 *Shoki* fighters – the latter were fitted with experimental rocket launchers under the wings so as to stand a better chance of bringing down the heavily-armed B-29s.

In June 1945 Jobo was promoted to captain and posted into the Pacific to take part in the Okinawan campaign – despite the general carnage of the late war struggle to defend the Home Islands, he survived to see peace once more.

Jobo's comrade, the great 'B-29 killer' Capt Isamu Kashiide, believes



Capt Ryotaro Jobo had nerves of steel and was a master swordsman. His final tally of 30+ victories included over a dozen B-29s either shot down or damaged in the CBI (via R Jobo)

that he downed 76 enemy aircraft, a figure that Gen Kanshi Ishikawa (former major and CO of the 246th Sentai) agrees with. According to Jobo's memoirs, however, he more modestly states that he downed over 30 aircraft, including 18 Soviet fighters at Nomonhan, two P-40s in China and two B-29s in the CBI, plus another ten Superfortresses probably destroyed or damaged. Ryotaro Jobo resides in Nagoya, Japan.

Warrant Officer Kosuke Tsubone

Kosuke Tsubone was one of the most talented aces in the 64th Sentai, but due to his CO's disdain for publicising the exploits of his pilots, the former's war career has remained relatively unknown.

He was born in Fukuoka Prefecture, Japan, and in February 1938 he entered the Youth Preparatory Flight Programme. Upon completion of this course, he moved on to the Kumagaya Flight School and graduated from here in July 1939. His first assignment was with the 13th Sentai, and at the start of the Pacific War, he was to be found in Taiwan undergoing training.

Tsubone was transferred to the 64th Sentai in April 1942, his first combat occurring on 5 May when he participated in a bomber escort mission to Paoshan, China. Engaged by P-40Cs from the 2nd AVG Sqn, his aircraft was hit in the fuel tank and forced to make an emergency landing. Despite this rather inauspicious start, Tsubone went on to complete many successful missions until war's end.

On 10 June 1945 MSgt Tsubone was awarded the Bukosho (B Class) for distinguished service in Phnom Penh by Lt Gen Takeshi Hattori, the 5th Air Division CO. At the same time, three other aces (WO Yojiro Ofusa and Maj Koki Kawamoto of the 50th Sentai, and Maj Hideo Miyabe of the 64th) were also decorated with the Bukosho.

WO Kosuke Tsubone achieved over ten victories in the CBI. He died in June 1990.

Kosuke Tsubone (far left) poses with fellow 64th Sentai pilots prior to flying the next over the Chinese plains in mid-1942. He finished the war with over ten kills, all scored flying Ki-43s (via H Sakaida)





1
Ki-27-Otsu of the 1st Chutai/11th Sentai, flown by WO Hiromichi Shinohara, Nomonhan, June 1939



2
Ki-27-Otsu of the 2nd Chutai/24th Sentai, Nomonhan, 1939



3
Ki-43-I of the 3rd Chutai/64th Sentai, flown by Capt Katsumi Anma, Ipoh Airfield, Malaya, January 1942



4
Ki-43-I of the 3rd Chutai/64th Sentai, flown by 1Lt Shogo Takeuchi, Malaya, early 1942



5

Ki-43-I of the 1st Chutai/50th Sentai, flown by Sgt Isamu Sasaki, Burma, 1942



6

Ki-43-I of the 3rd Chutai/50th Sentai, flown by Cpl Satoshi Anabuki and 1Lt Shigeru Nakozaki, Burma, January 1943



7

Ki-43-I of the 64th Sentai, flown by Group CO Maj Tateo Kato, Burma, Spring 1942



8

Ki-43-I of the 2nd Chutai/25th Sentai, flown by Sgt Koshiro Otake, Nanking, China, Summer 1943



9

Ki-43-II of the 3rd Chutai/54th Sentai, flown by MSgt Akira Sugimoto, northern Japan, late 1943



10

Ki-43-II of the 64th Sentai, flown by Capt Hideo Miyabe, Burma, Spring 1944



11

Ki-43-II of the 2nd Chutai/64th Sentai, flown by Capt Hideo Miyabe, Palembang Airfield, Sumatra, Summer 1943



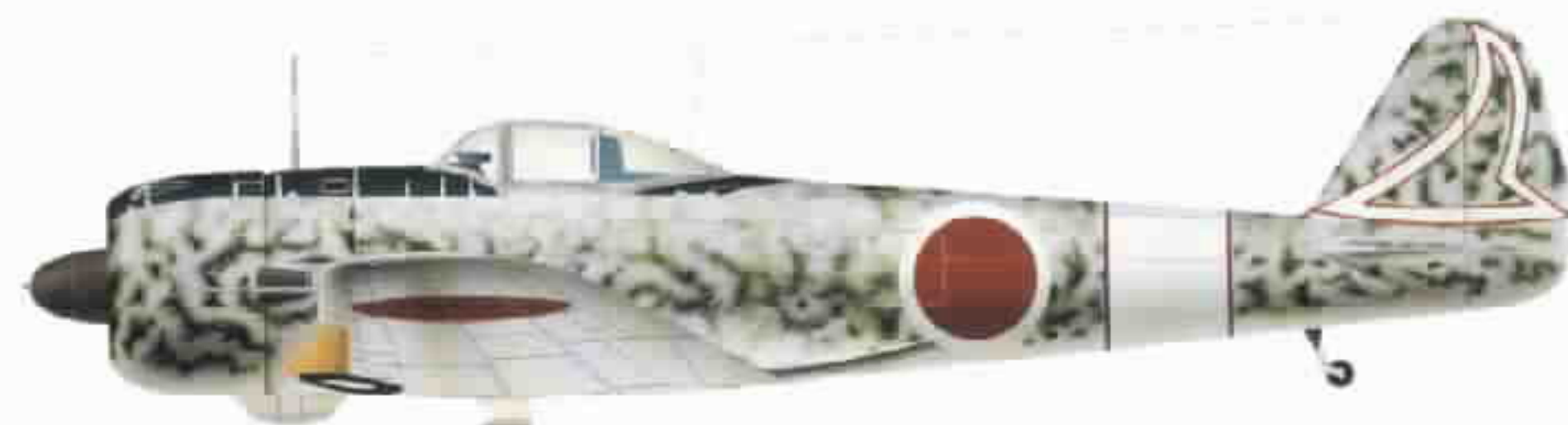
12

Ki-43-II of the 3rd Chutai/64th Sentai, Lt Yohei Hinoki, Mingaladon Airfield, Burma, November 1943



13

Ki-43-II of the 3rd Chutai/59th Sentai, flown by MSgt Tomio Hirohata, New Guinea, Summer 1943



14

Ki-43-II of the 1st Chutai/33rd Sentai, flown by Capt Kiyoshi Namai, Gelumbang Airfield, Sumatra, Summer 1944



15

Ki-43-III-Ko of the 2nd Chutai/64th Sentai, flown by WO Kosuke Tsubone, Krakor Airfield, Indochina, May 1945



16

Ki-43-II-KAI of the 1st Chutai/64th Sentai, flown by Chutai CO Maj Toyoki Eto, Saigon, Indochina, July 1944



17

Ki-43-III-Ko flown by the 64th Sentai CO, Maj Hideo Miyabe, Krakor Airfield, Indochina, May 1945



18

Ki-43-II of the 2nd Chutai/59th Sentai, flown by Capt Shigeo Nango, But Airfield, New Guinea, September 1943



19

Ki-43 II of the 25th Sentai, flown by Maj Toshio Sakagawa, Hankow Airfield, China, Spring 1944



20

Ki-44-II-Hei of the 3rd Chutai/70th Sentai, flown by Capt Yoshio Yoshida, Kashiwa Airfield, Japan, June 1945



21

Ki-44-II-Hei of the 3rd Chutai/70th Sentai, flown by 2Lt Makoto Ogawa, Kashiwa Airfield, Japan, June 1945



22

Ki-84-Ko of the 248th Sentai, flown by WO Kenji Fujimoto, Taisho Airfield, Osaka, Japan, July 1945



23

Ki-45-KAI-Ko of the 3rd Chutai/5th Sentai, flown by Chutai CO Capt Fujitaro Ito, Kiyosu Airfield, Japan, March 1945



24

Ki-45-KAI-Hei of the 4th Sentai/Kaiten Tai, flown by Lt Miosaburo Yamamoto, Japan, early 1945



25

Ki-45-Kai-Ko of the 2nd Chutai/4th Sentai, flown by Lt Isamu Kashiide, Kozuki Airfield, Japan, 1944-45



26

Ki-45-Kai of the 2nd Chutai/4th Sentai, flown by WO Sadamitsu Kimura, Kozuki Airfield, Japan, January 1945



27

Ki-45-Kai of the 2nd Chutai/4th Sentai, flown by Lt Hannoshin Nishio, Kozuki Airfield, Japan, June 1945



28

Ki-45-Kai of the 3rd Chutai/53rd Sentai, flown by Sgt Nohuji Negishi, Matsudo Airfield, Japan, November 1944



29

Ki-81-I-Hai of the 244th Sentai, flown by Sgt Masao Itagaki, Chofu Airfield, Tokyo, January 1945



30

Ki-81-I-Hai of the 2nd Chutai/244th Sentai, flown by MSgt Tadao Sumi, Chofu Airfield, Tokyo, November 1944



31

Ki-81-I-KA No 3295 of the 244th Sentai, flown by Group CO Capt Teruhiko Kobayashi, Japan, January 1945



32

Ki-81-I-KA No 3024 of the 244th Sentai, flown by Group CO Capt Teruhiko Kobayashi, Japan, December 1944



33

Ki-61-I-KaIc No 3024 of the 244th Sentai, flown by Group CO Capt Teruhiko Kobayashi, Japan, April 1945



34

Ki-61-I-KaIc of HQ flight/244th Sentai, flown by TSgt Kiyoshi Ando, Japan, January 1945



35

Ki-61-I-Otsu of the 2nd Chutai/68th Sentai, flown by Capt Shogo Takeuchi, Wewak, New Guinea, October 1943



36

Unmarked Ki-84-Ko of the Army Flight Test Centre, flown by MSgt Isamu Sasaki, Fussa Airfield, Tokyo, 1945



37

Ki-84-Ko of the 1st Chutai/103rd Sentai, flown by Capt Tomojiro Ogawa, Itami Airfield, Japan, January 1945



38

Ki-84-Ko of the the HO Chutai/ 50th Sentai, flown by Maj Koki Kawamoto, Phnom Penh, Indochina, April 1945



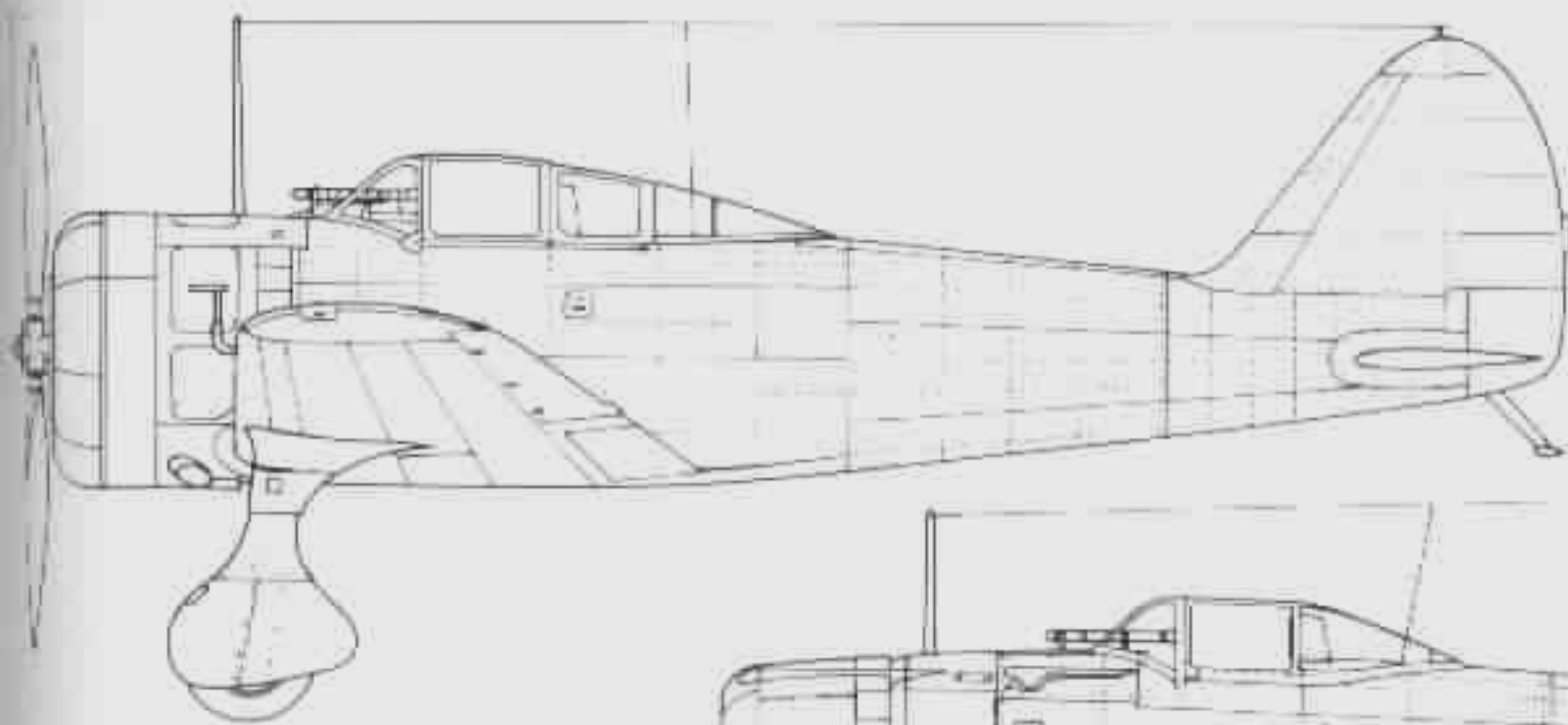
39

Ki-84-Ko of the 3rd Chutai/103rd Sentai, flown by 1Lt Shigeyasu Miyamoto, Itami Airfield, Japan, January 1945

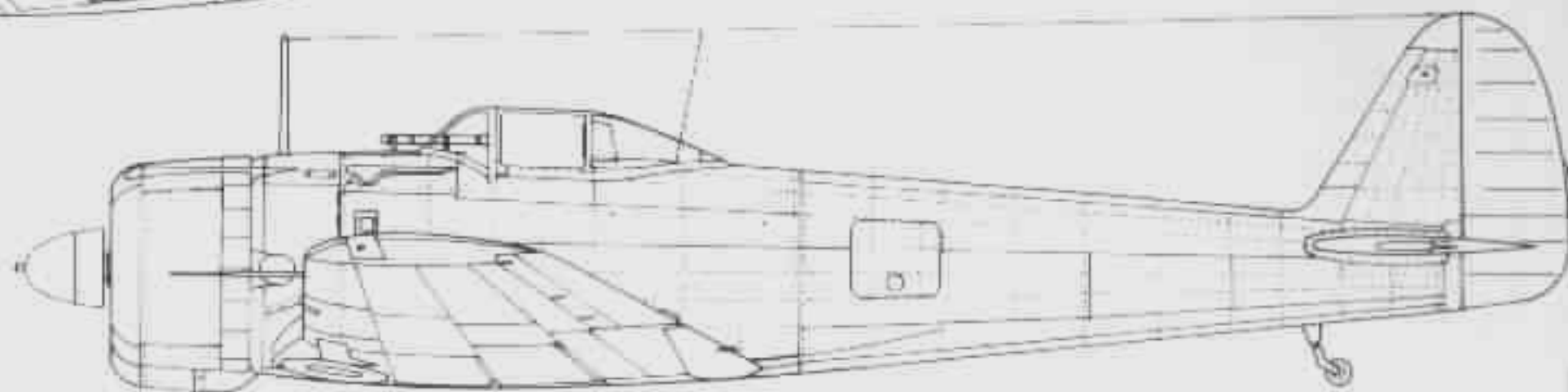


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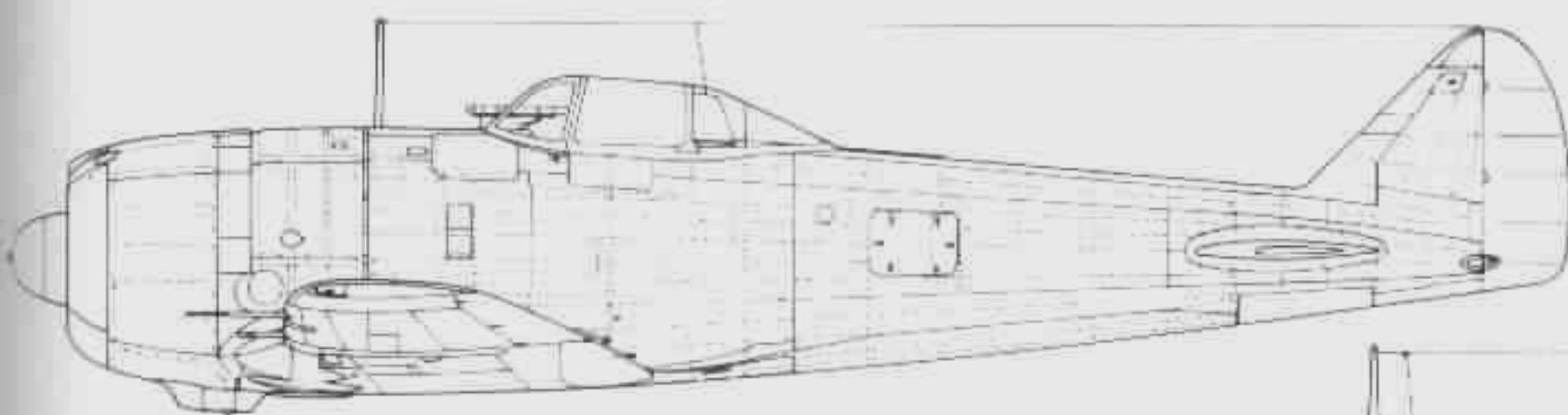
Ki-84-Ko of the 1st Chutai/103rd Sentai, flown by Capt Tomojiro Ogawa, Itami Airfield, Japan, January 1945



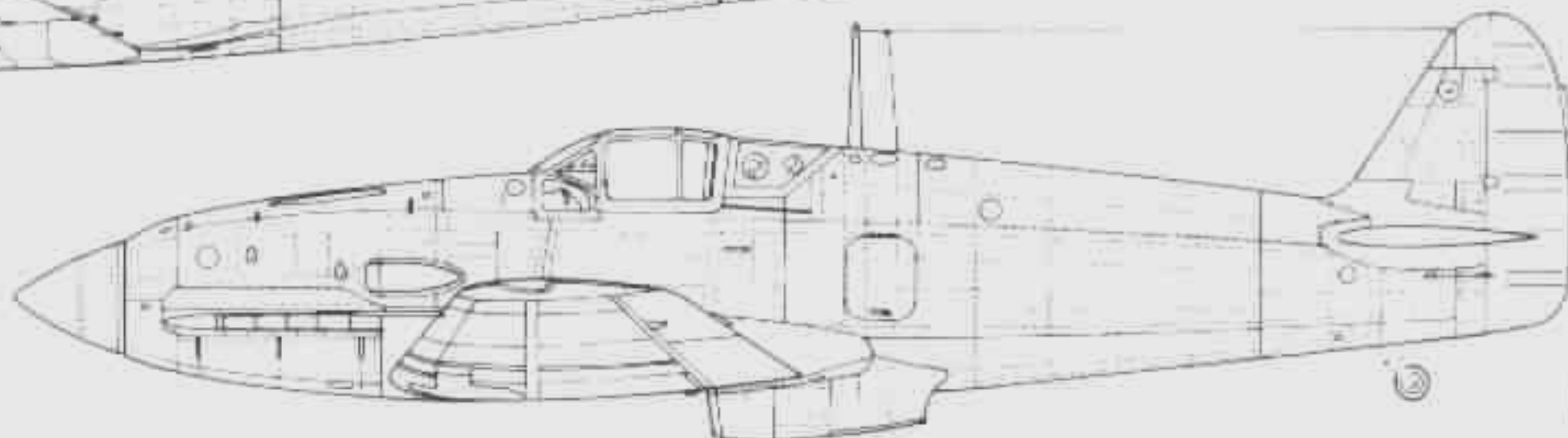
Ki-27-Otsu 'Nate'



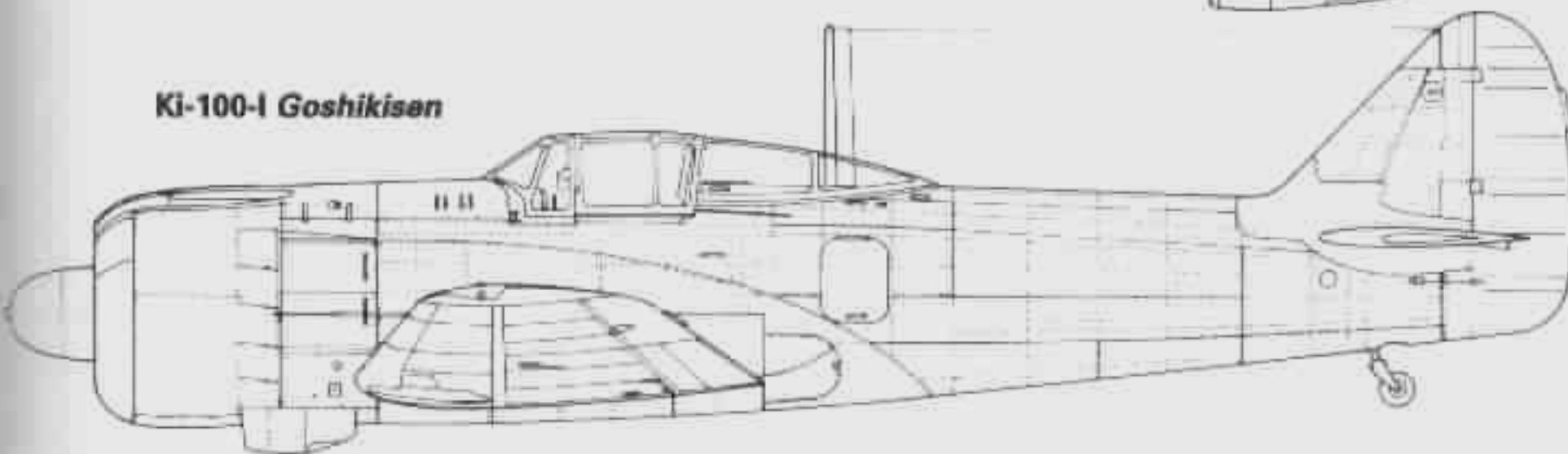
Ki-43-I 'Oscar I'



Ki-44-I 'Tojo'



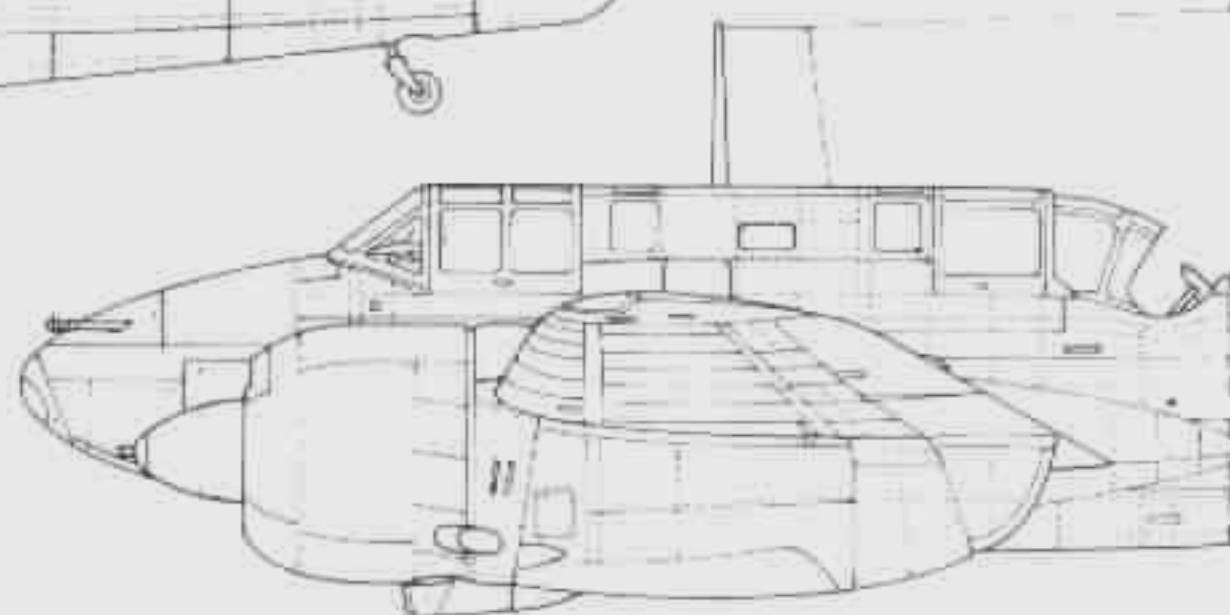
Ki-61-I-KAI 'Tony'



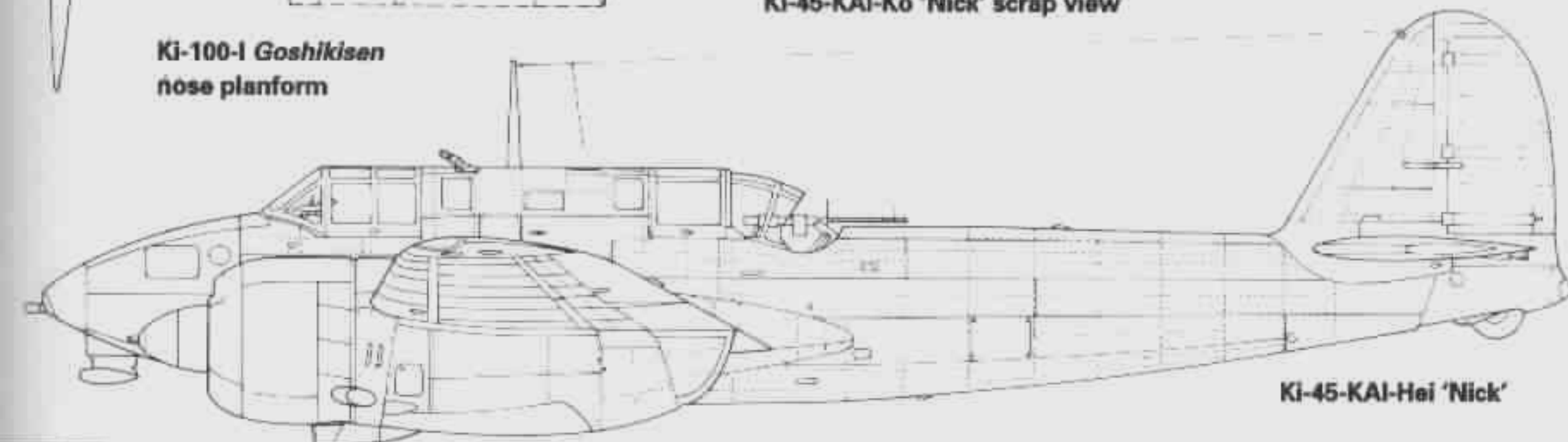
Ki-100-I Goshikisen



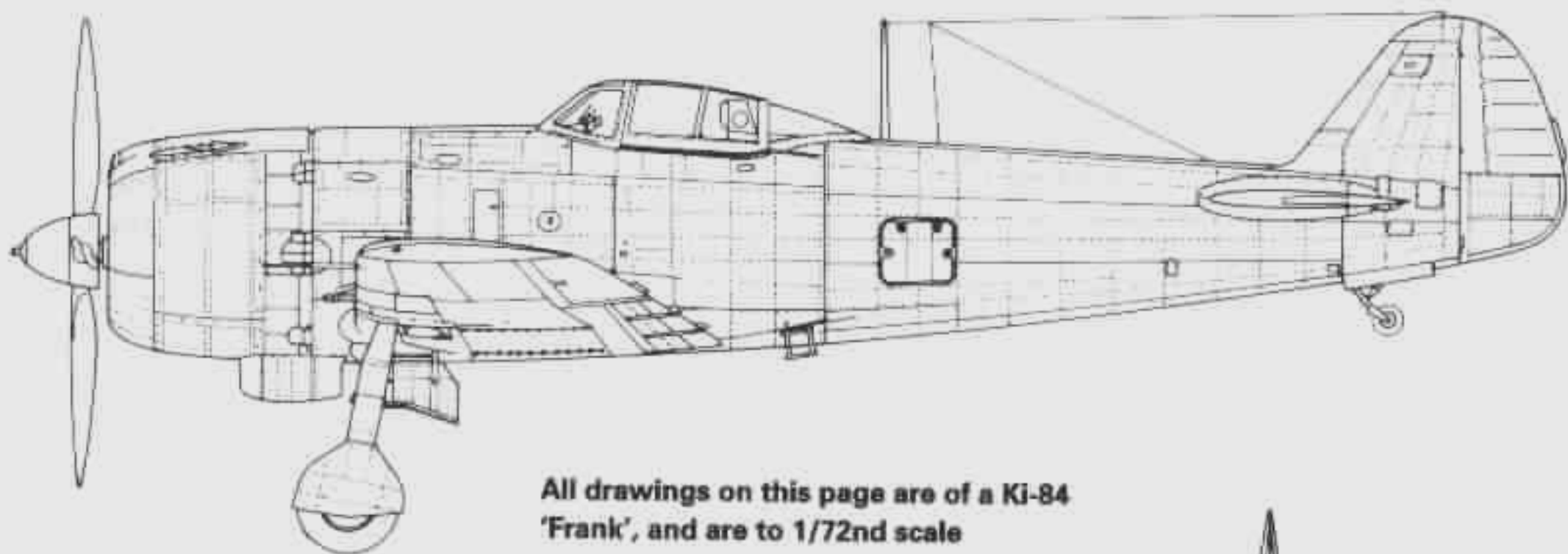
Ki-100-I Goshikisen
nose planform



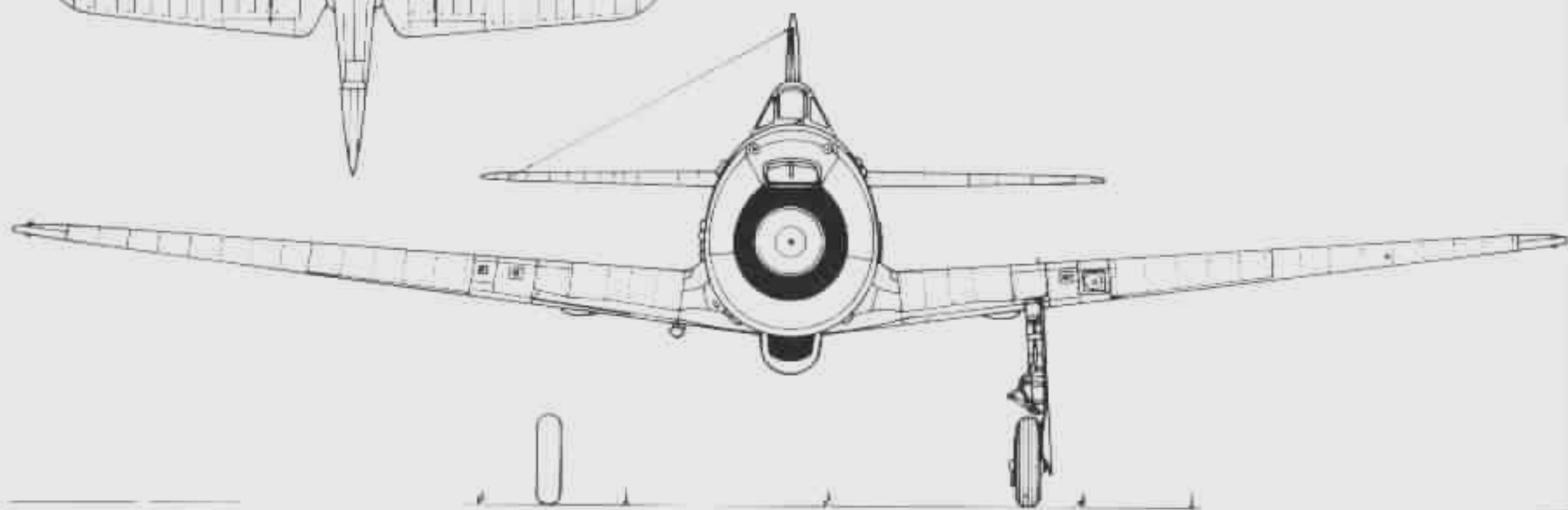
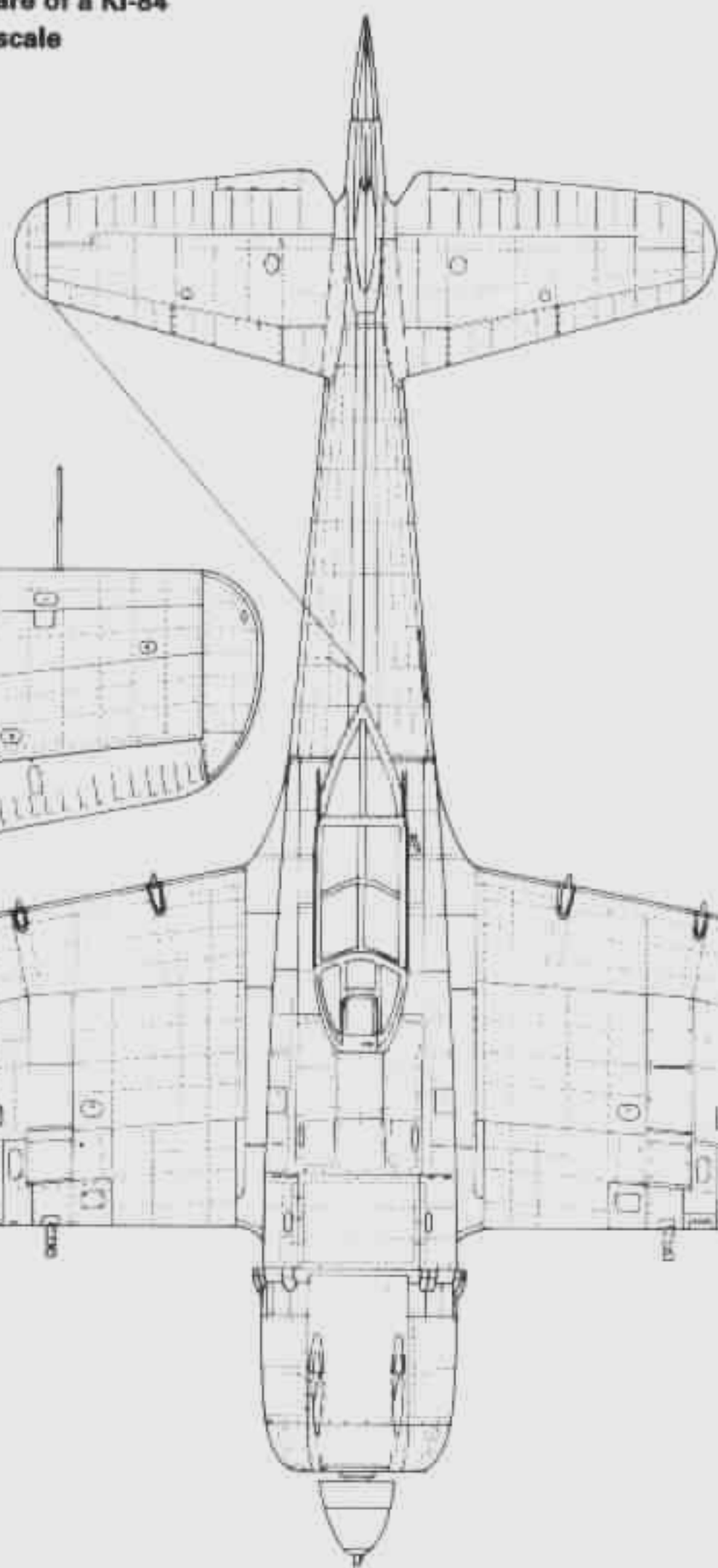
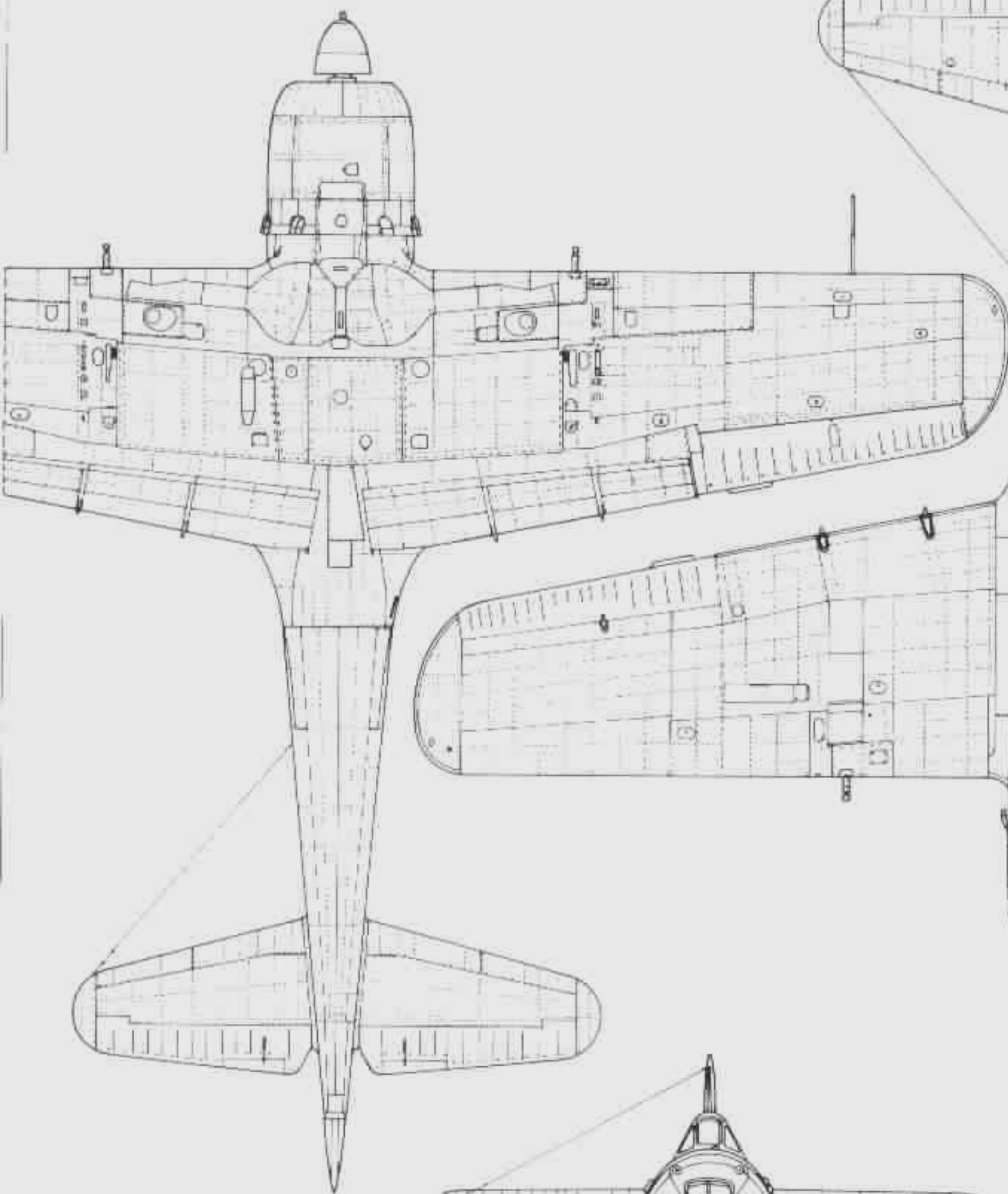
Ki-45-KAI-Ko 'Nick' scrap view



Ki-45-KAI-Hei 'Nick'



All drawings on this page are of a Ki-84
'Frank', and are to 1/72nd scale



NEW GUINEA

'No one ever returns alive from New Guinea' was the often-heard saying uttered by the Japanese during the war. If there ever was a 'Russian Front' for their army in World War 2, then the 'green desert' of New Guinea was it. Entire units, ill-equipped and cut off from their main forces, simply disappeared into the thick tropical environment never to be seen again.

Ambitious pre-war plans to threaten Australia made the capture of New Guinea a necessity for the Japanese. On 8 March 1942 their forces landed at Salamaua on the eastern coast of New Guinea, their objective being Port Moresby, some 200 miles to the south on the west coast. This strategic port was considered to be the gateway to Australia, and Allied Forces prepared to defend it tenaciously.

At the time of the invasion, the air war over New Guinea was a JNAF affair, as the Japanese Army had no established airfields to operate from. Navy aircraft rotated between bases at Lae and Salamaua, along the eastern coast of New Guinea and Rabaul, on New Britain. In April a naval air group (the Tainan Kokutai) arrived at Lae from Rabaul, and they immediately set to work flying bomber escort missions to Port Moresby, as well as undertaking routine combat patrols.

In response to these attacks, the Australians doggedly defended Port Moresby with the limited resources they had at hand. Indeed, so desperate was the need to provide some form of air defence for the beleaguered troops that the RAAF's No 75 Sqn was pressed into service after a crash training programme on Kittyhawk Mk IAs that lasted just nine days! Led into action by Sqn Ldr 'Old John' Jackson, who had become an ace in 1941 whilst serving with No 3 RAAF Sqn in North Africa, the unit managed to keep the JNAF at bay for 44 days. In that time its pilots shot 18 aircraft down, and destroyed a further 17 on the ground, but in turn suffered heavy losses. The survivors of No 75 Sqn were withdrawn on 7 May, replaced by USAAF units rushed into the area from Australia.

Although the Australian troops and aircraft had hindered the Japanese invasion on land, the fate of Port Moresby was finally sealed during the Battle of Coral Sea, which took place to the north-east of New Guinea in early May. The Japanese invasion convoy was stopped cold by a US Navy task force led capably by Adm Chester Nimitz. However, those troops already on New Guinea would not give up, and proceeded to hack their way overland towards their objective some 200 miles to the south of Salamaua.

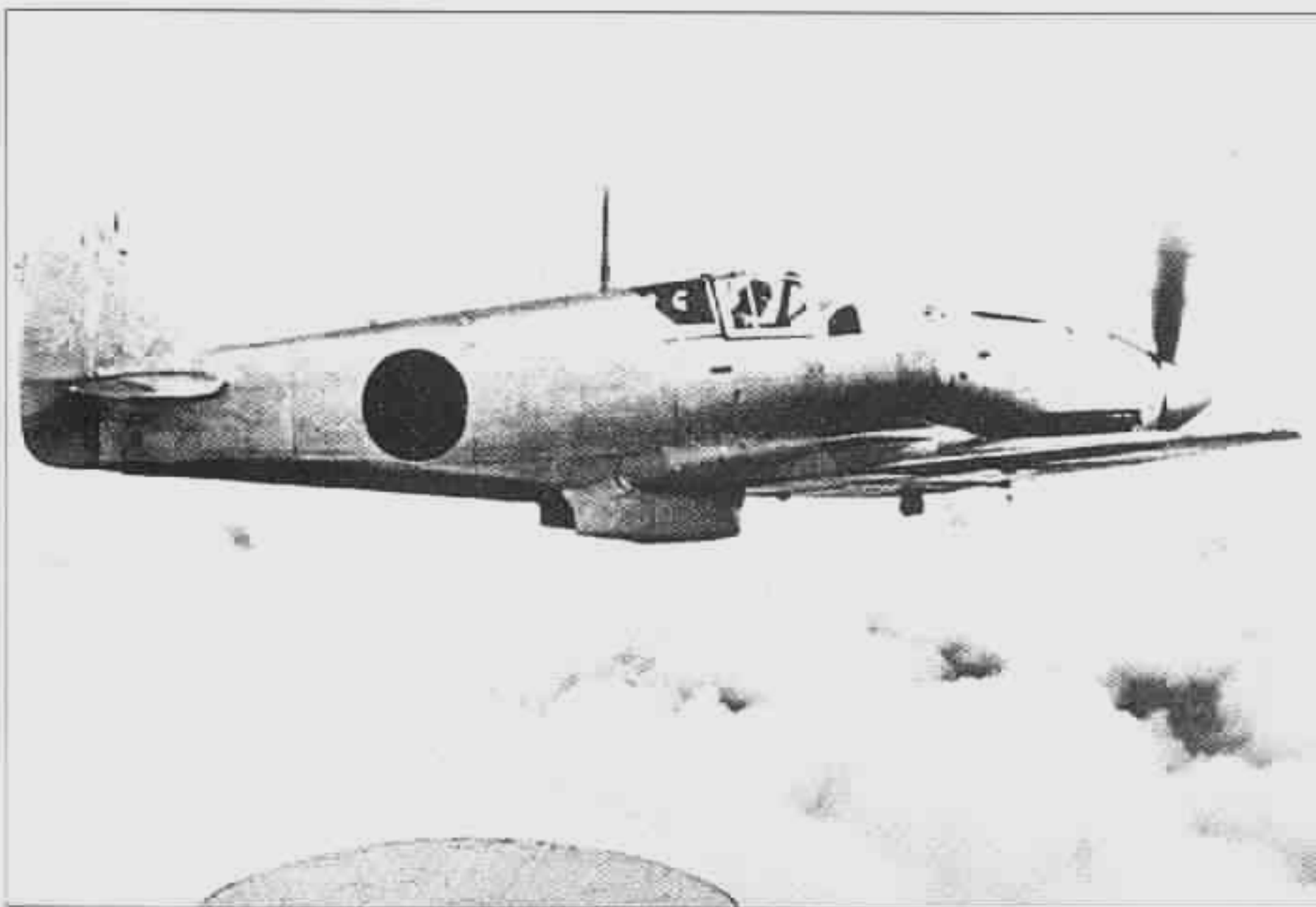
One of the first pieces of real estate that had to be captured was Buna, which was at the head of the Kokoda Trail to Port Moresby. Both the Australian and the Japanese armies made a rush for the town, and in a series of skirmishes, the latter pushed the Allies back down the trail, but at a terrible cost in human life. Despite having lost Buna, Australian and American forces waged a continual guerrilla which seriously hampered the Japanese advance southward. To add to this, thousands of Japanese infantrymen perished from tropical diseases and widespread malnutrition.

Despite these setbacks, the Japanese had advanced to the outskirts of Port Moresby by 17 September. This was as far as they got, however, as Allied Forces, bolstered by fresh troops shipped in from Australia, began their counteroffensive and eventually pushed their opponents back into the jungle from whence they had come. The Japanese finally lost Buna on 2 January 1943.

Milne Bay, at the tip of New Guinea, gained importance when the Japanese march to Port Moresby over the Kokoda Trail became almost insurmountable. The Australians were not about to let the enemy establish a base there, for that could then be used as a launch pad for aircraft to strike at Port Moresby. Despite the fact that there were more than 8700 Allied troops at Milne Bay, the Japanese Army thought that they could easily overwhelm the garrison. During August and September 1942 both sides fought furiously to gain the upper hand, Allied aircraft strafing and bombing landing convoys and supply areas with devastating results. These sorties inflicted serious losses on the attacking troops, and allied with Japanese forces being tied up in the Solomons attempting to defend Guadalcanal, it soon became obvious to senior army officers that there was no hope of reinforcements arriving to make good the numbers. The order to retreat was given on 5 September.

The first JAAF unit to arrive in the New Guinea theatre of operations was the 11th Sentai (a proud veteran of the Nomoman Incident), which flew into Rabaul with its Ki-43-I-Heis on 18 December 1942 from Surabaya, Java. Two days after Christmas they flew their first joint mission with Navy Zeroes, escorting 'Val' dive-bombers to Buna. En route they were intercepted by P-38s from the 9th FS, and in the wild dogfight that ensued, 2Lt Richard I Bong (who would later become the top Amer-

This factory-fresh Ki-61-I was photographed enroute to New Guinea, and the 68th or 78th Sentais, in early 1943. Once in-theatre, the sleek 'Tony' would be hastily daubed with dark green paint so as to give it a modicum of invisibility from the prying eyes of USAAF fighter and bomber crews when parked on the ground (via Phil Jarrett)



ican ace of World War 2 with 40 kills – see *Aircraft of the Aces 14 Lightning Aces of the Pacific and CBI* for more details) achieved his first victories when he claimed a Zero and a 'Val'. Capt 'Tommy' Lynch became the first ace of the 39th Fighter Squadron when he downed two 'Oscars', and he would go on to score 20 victories before being killed in action in March 1944. Overall, the Americans claimed 13 enemy aircraft destroyed with no loss, but in reality the Japanese Navy lost just one Zero and had another force-landed, whilst the 11th Sentai also suffered a single casualty – WO Tadashi Yoshitake.

The brunt of the early JAAF effort in New Guinea was borne by the 11th and 1st Sentais, their main task being to provide air cover for the ground troops. The 1st Sentai – another ex-Nomonhan unit – flew into Rabaul with its 'Oscars' in January 1943, and proceeded immediately to Guadalcanal. On 12 April, the sentai departed for Wewak. In August 1943 the JAAF activated the 4th Air Army at this base, its main operating airfields being at Hansa, Wewak, But and Aitape. Other bases included Hollandia (to be used for withdrawal purposes), Lae, Madang and Salamaua. Between 10 August and 20 September, JAAF aircraft from Rabaul flooded into New Guinea.

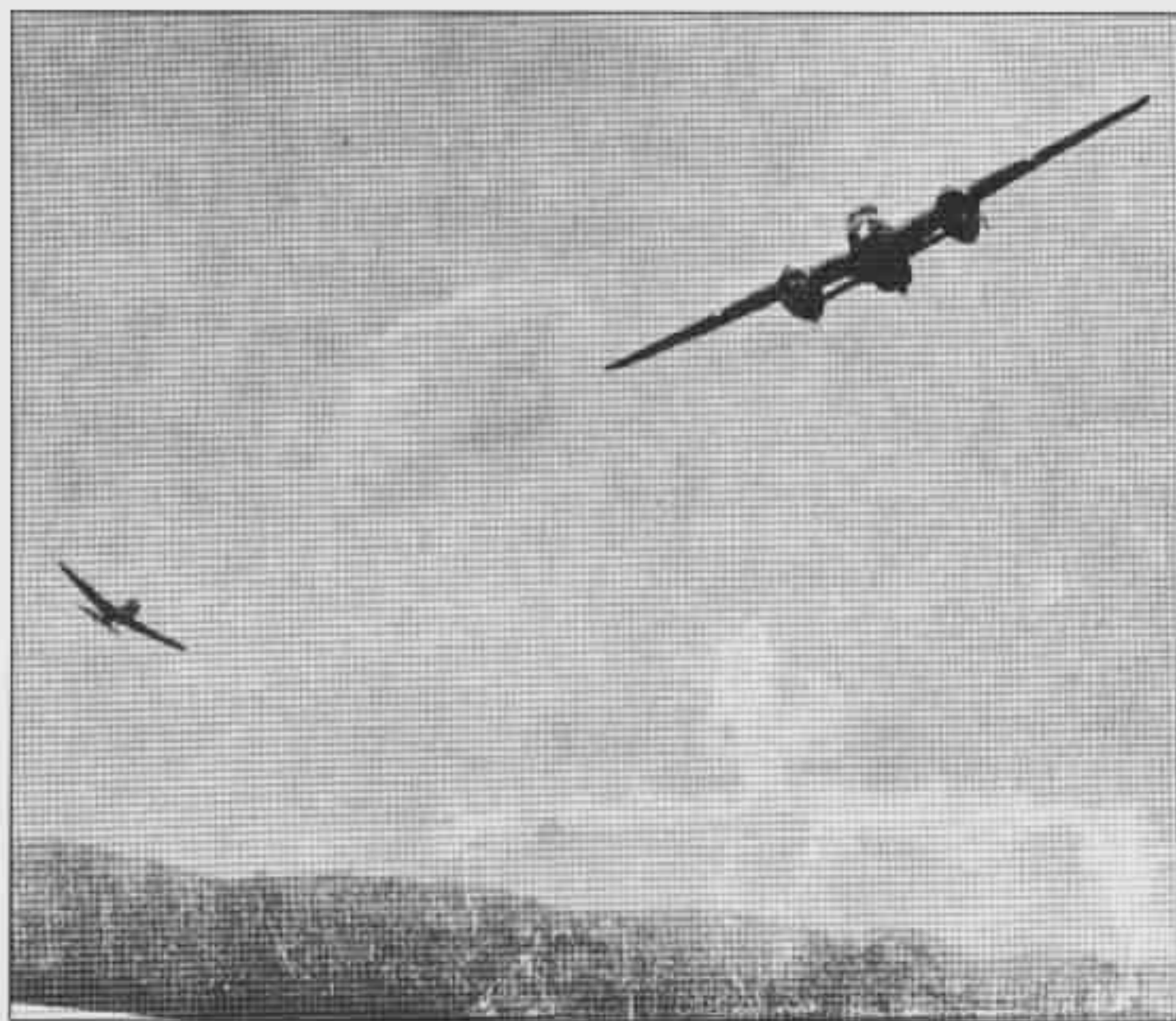
This theatre became the combat testing ground for the new Kawasaki Ki-61 *Hien* (Swallow), which was given the Allied codename 'Tony' under the mistaken belief that it was of Italian origin! The only 'Tony' units to operate in New Guinea were the 68th and 78th Sentais, the former being the first air group to receive the new Ki-61-I fighter in late 1942. Both units transferred to Wewak during the summer of the following year.

The 'Tony', with its liquid-cooled Kawasaki Ha-40 inline engine (a licence-built derivative of the Daimler-Benz DB 601A), armour protection and self-sealing fuel tanks was a radical departure from the standard *Hayabusa*. Resembling the German Messerschmitt Bf 109 thanks to their shared powerplant, the Ki-61-I was armed with two nose-mounted 12.7 mm machine guns and a pair of 20 mm cannon (again licence-built German MG 151 guns) in the wings, thus giving it a far greater 'punch' than its Ki-43-II predecessor. With a maximum speed of 368 mph at 15,945 ft, it was also considerably quicker than the 'Oscar II', which could manage just 329 mph at 13,125 ft. Indeed, the latter only retained the upper hand over the Ki-61 in terms of its unmatched manoeuvrability and impressive range.

The air war over New Guinea had worsened for the Japanese as 1943 progressed, and it was hoped that the new Ki-61 would tip the balance back in the JAAF's favour. However, like all new types, the 'Tony'

Below and right

This amazing pair of genuine combat photos show a Ki-43 attacking a low-flying B-25 somewhere off the coast of northern New Guinea in 1943. On this occasion the Mitchell crew managed to escape (via Maru)



initially suffered from teething troubles, particularly in relation to the poor quality of the fuel available in New Guinea and chronic overheating problems associated with the aircraft's ineffective radiators. As an example of this, 1Lt Mitsuyoshi Tarui (a veteran pilot of the 68th who scored 38 victories before he was killed) was forced down three times in just a matter of weeks due to engine problems. Pilots soon became distrustful of the *Hien*.

American fighter pilots were also unfamiliar with the Ki-61, the 39th FS first encountering the sleek new aircraft on 18 July when they engaged elements of the 78th Sentai between Lae and Salamaua. 1Lt Gene Duncan stated that he had damaged an aircraft which 'resembled a Me 109', whilst his fellow squadronmates claimed the destruction of two Ki-61s, along with four probables and two damaged – the Japanese suffered no losses. However, the 78th Sentai claimed its first victory courtesy of 1Lt Fujishima. Two days later the 68th Sentai scored its first kill in New Guinea when the unit attacked Allied positions at Benabena. Capt Shogo Takeuchi's (30+ kills) five-aircraft formation attacked and shot down a B-24.

The second American claims for this new enemy fighter occurred 24 hours after the 68th Sentai's B-24 kill when P-38s from the 39th and 80th FSs encountered 'Tonys' (of the 68th and 78th Sentais) and 'Oscars' between Ramu Valley and Madang. The Japanese fighters had been scrambled to intercept B-25s attacking the Japanese base at Bogadjim, and in the subsequent mêlée, American pilots claimed 22 victories without suffering a single loss. Again, USAAF overclaiming was rife, for only four Japanese fighters were downed, including two 'Tony' pilots from the 78th Sentai. Their Japanese opponents put in claims for two Lightnings destroyed.

With the fall of Buna, the main battleground became the Lae-Salamaua-Markham Valley region. By this stage in the campaign Japanese supply convoys from Rabaul were struggling to make it to New Guinea

due to marauding Allied submarines and surface vessels dominating the sea lanes. As a result of this naval blockade, most units were suffering from a lack of spare parts. The loss of skilled mechanics killed in endless bombing attacks also drastically reduced the effectiveness of various air groups. Col Rinsuka Kaneko, a staff officer of the 4th Air Army in New Guinea, recalled:

'Up until April 1943 about 50 per cent of aircraft on hand were in normal operation. Subsequent to that time only about 25 per cent of the total aircraft on hand were in full operation. This figure became even lower as the war progressed.'

The Allied amphibious landing south of Salamaua on 29-30 June



1943 was just another in a sequence of defeats inflicted upon the Japanese during the space of 12 months. Salamaua fell on 11 September, and the Allied Force advanced and took Lae five days later. By 2 October they had captured Finschhafen.

On 11 October 1943 the 14th Air Brigade suffered a great loss at the hands of 22-kill ace Col Neel Kearby of the 348th FG. Japanese radar detected the approach of P-47D Thunderbolts and scrambled 'Tonys' (68th Sentai) and 'Oscar IIs' (13th Sentai) for an interception near Wewak. Kearby recalled soon after the sortie;

'At 1115 one Zeke (actually a 'Tony') was sighted at 9 o'clock below at 20,000 ft. I came in on him from 7 o'clock above and opened fire at 1500 ft. He took no evasive action, caught fire, and dived into the sea.'

His victim was Col Tamiya Teranishi, and Kearby went on to claim a further five victories in this single sortie, thus earning him the Medal of Honor.

With the Japanese bastion at Rabaul isolated, its forces on New Guinea were rapidly declining. Gen Douglas MacArthur systematically bypassed pockets of enemy troop concentrations and let them perish through lack of supplies. B-24s and B-25s had been employed, meanwhile, to break the back of the JAAF. The air blockade of New Guinea was so complete by

The end of the line for a 68th Sentai pilot. On 10 December 1943 Maj Gerald R Johnson of the 9th FS shot down a 'Tony' near Gusap whilst flying a P-47D-4, thus recording his 11th victory. The pilot bailed out and Johnson called back to base on the radio to ask them to send a patrol out to capture his erstwhile foe. Australian troops on the ground duly found the Japanese pilot, who was observed to be moving around under his parachute – he was possibly wounded. Not prepared to take any chances, the soldiers gave him a burst from their Tommy guns, and he was killed outright. Johnson was not pleased upon hearing this news as he wanted to meet his worthy opponent (via J R Bruning)



the end of 1943 that mass-starvation and disease destroyed entire units. The Japanese Navy also abandoned New Guinea to their doomed army brethren in order to concentrate their forces in preparation for the anticipated defence of the Marianas.

On 22 April 1944 the American 1st Corps landed at Hollandia, and the 68th Sentai was forced to evacuate their air base. The 14th Air Brigade commander, Col Kenzo Ondo, was quickly killed in the ground fighting, and pilots and groundcrews discarded their aircraft and fled into the jungles.

The 68th Sentai (along with the 77th, 78th and 248th) was disbanded on 25 July 1944, and the many surviving ground- and aircrews joined the ranks of the infantry. Despite doing their level best to avoid offensive manoeuvres against overwhelming Allied forces, thousands died in the jungles simply trying to survive through to VJ-Day.

Warrant Officer Katsuaki Kira

Katsuaki Kira has the distinction of being one of just a handful of fighter pilots who survived six years of continuous combat in the various campaigns contested by the JAAF. Born in Kumamoto Prefecture, Japan, in 1919, he graduated from flight school in July 1938 and was sent to the Akeno Fighter School for combat training. Once he had successfully completed the course, Kira was sent to Hailar, Manchuria, to join the 24th Sentai.

Soon after his arrival the Nomonhan Incident flared up, but Cpl Kira did not participate in the initial combats. In June, a second major skirmish ensued, and his sentai was despatched to the frontline. Kira downed his first enemy fighter – an I-16 – over the Khalka River on 22 June, and by the time of the ceasefire in mid-September he had amassed nine victories, and a wealth of valuable combat experience.

When the Pacific War began in December 1941, Kira participated in the attack on the Philippines, but returned to Manchuria after the swift conclusion to the campaign. His next taste of action came when his sentai was involved in the air defence of the Palembang oilfields in the former Dutch East Indies.

In May 1943 the 24th Sentai, recently re-equipped with new Ki-43-II-Ko 'Oscar IIs', was sent to But Airfield in New Guinea – Kira found himself embroiled in bitter dogfights with USAAF P-38s almost immediately. On the 24th of the month, whilst preparing to land at Madang Airfield, he was notified that an enemy bombing raid was in progress at the base. Kira immediately throttled up on his aircraft and commenced a steep climb for altitude. Once he had gained sufficient height, he searched out a formation of fleeing B-24s and repeatedly attacked them, damaging two in a running gunfight.

On 3 August Kira succeeded in shooting down a B-17 over Madang Airfield, followed just days later by a duel to the death over Lae with a P-38. He managed to down his opponent, but in turn was forced to belly land on the airstrip due to the severe damage inflicted to his 'Oscar II'.

In October 1943 Kira departed New Guinea with his squadron for Manila, in the Philippines. A year later he was transferred to the 200th Sentai, which was in the process of forming at Akeno. This new elite unit, comprised of veterans from various frontline sentai and instructors from



WO Katsuaki Kira, seen here during the Nomonhan Incident in 1939, survived the 'killing fields' of New Guinea. After escaping to the Philippines, Kira and his unit (the 24th Sentai) came directly up against the top American ace of the war, Maj Richard I Bong (*via Maru*)

the Akeno Fighter School, was armed exclusively with the Ki-84 and rushed to the Philippines, where it initially flew escort missions for the remnants of the Japanese naval fleet.

Kira's sentai encountered P-38 ace Maj Dick Bong, now of the 5th Fighter Command, as well as the high-scoring squadrons of the 49th FG around Leyte. During combat with Lightnings in the Philippines, the veteran pilot received a rare citation from Gen Tominaga, CO of the 4th Air Army, for single-handedly engaging ten USAAF fighters and shooting down two. Kira was also promoted to the rank of warrant officer.

In January 1945 WO Kira withdrew to Taiwan with the survivors of his unit, the 200th Sentai having been nearly destroyed in the fighting for the Philippines – at the end of its first month in action, for example, only nine serviceable fighters were left.

Katsuaki Kira's final combat was in the bitter air battle over Okinawa as a member of the 103rd Sentai. He survived the war with a score in excess 21 kills (nine at Nomonhan, seven in New Guinea and at least five in the Philippines and during home defence duty).

After the war he served in the Japan Self-Defense Air Force.

Warrant Officer Kazuo Shimizu

Kazuo Shimizu became famous for his expertise in the use of aerial burst bombs (Ta-dan) against American aircraft in New Guinea. He was born in Tokyo in 1918 and started his army career as a private in the field artillery. He graduated from flight school at Tachiarai in May 1941, and in February of the following year was assigned to the 59th Sentai.

Due to the lull in fighting following the initial invasion of the Dutch East Indies, Shimizu saw little combat during the many fleet escort missions and air patrols he participated in around Java. Indeed, it wasn't until early 1943 that he recorded his first kill in the defence of Timor.

WO Kazuo Shimizu (squatting center holding a sign) with members of the 3rd Chutai of the 59th Sentai, Ashiya Airfield, Japan, in December 1944. The placard reads 'Inouye Squadron' (via Y Izawa)



Capt Shigeo Nango gained all of his 15+ victories against the Americans over New Guinea. Despite this success in the air with the 59th Sentai, he fought a losing battle against both the USAAF and the tropical environment. Nango was finally killed whilst attempting to repel an overwhelming force of B-24s on 23 January 1944 (via Y Izawa)



When the JAAF sortied against Darwin on 20 June 1943, the 59th Sentai's 22 Ki-43-II-Kos were given the responsibility of escorting 27 bombers to the target. Unlike the surprise raids of the previous year, when JNAF machines had caused much devastation to northern Australia with relative impunity, the RAAF had since bolstered its air defences in the region – 46 Spitfire LF VCs of No 1 Fighter Wing were waiting for the approaching raiders.

In the subsequent action, the Japanese claimed 15 victories for the loss of a fighter and a bomber, whilst the Australians claimed nine bombers and five fighters destroyed in return for the destruction of two Spitfires. Shimizu participated in this dogfight, but his claims are unknown.

In July, the 59th Sentai moved to their new base at But, on the north-eastern coast of New Guinea, but Shimizu fell ill with dysentery soon after his arrival and was grounded for some time.

Having regained his strength after several months out of the cockpit, Shimizu returned to action in early November. On the 9th of the month he single-handedly took on a formation of six USAAF P-40Ns of the 35th FS near Alexishafen and subsequently claimed one shot down.

Around this time word filtered through to But of the successful deployment of aerial burst bombs against large formations of enemy bombers by JNAF units in Rabaul. The JAAF duly decided to try the new weapon against the increasing hordes of B-25s and B-24s being encountered over New Guinea, and on 14 February 1944 Shimizu dropped a Ta-dan on a formation of Mitchells over But and observed three bombers crash as a result of the weapon's detonation. The next day he repeated the attack on a formation of P-47 Thunderbolts, and two fell from the sky. However, on this occasion Shimizu's 'Oscar II' was badly shot up in the subsequent counter-attack by the surviving P-47s, and he barely made it back to But. Based on his achievements over a 48-hour period, WO Shimizu was awarded a rare commendation.

The 59th Sentai, decimated by the ceaseless heavy fighting against overwhelming numbers of Allied aircraft, left New Guinea four days after the second Ta-dan attack and headed for Ashiya Air Base in Kyushu, Japan. Shimizu continued fly with the sentai in the home defence role until war's end, by which stage he had achieved at least 18 victories, of which half were bombers.

Captain Shigeo Nango

Capt Shigeo Nango was one of the very few JAAF aces who gained all of their victories in New Guinea, this great fighter leader receiving much publicity during World War 2. Born in Tokyo in 1917, he was the younger brother of the great naval fighter leader, Lt Cdr Mochifumi Nango (he scored eight victories but was killed in action over China on 18 July 1938), and graduated from the Army Military Academy in April 1939. He undertook a course of fighter training at Akeno before being posted to the 33rd Sentai.

When the Nomonhan Incident erupted in May 1939 Nango went to Manchuria, but the young officer did not participate in the fighting, rather spending his days honing his skills as a fighter pilot in myriad training flights.

In January 1942, Capt Nango became a squadron leader of the 2nd

Chutai/59th Sentai, and he led the unit in the Dutch East Indies on convoy escort patrols and ground support sorties. Eighteen months later he participated in the large June raids against Darwin. The following month he was posted into the frontline in New Guinea along with the rest of the 59th Sentai, and it was in this theatre that he blossomed into a first-rate fighter pilot and leader, flying daily sorties from But Airfield.

The Allied Forces needed an advanced fighter base to assault Lae and Salamaua, so they began to carve out an airfield at Tsili Tsili, 50 miles west of Lae. The secret airstrip was soon discovered by the Japanese, and on 15 August seven Ki-21 'Sally' bombers, escorted by 36 fighters from the 59th and 24th Sentais, raided the site. The JAAF arrived just as transport aircraft were landing, and Capt Nango subsequently shot down a C-47 (confirmed through USAAF records).

The Americans were quickly stung into action by the attacking force, P-39Ns from the 40th and 41st FSs intercepting the Japanese Force as it retreated westward back to But. In the ensuing 'slugfest', the Japanese lost three fighters and six bombers, whilst the Americans had four fighters shot down, although only one USAAF pilot was killed. Nango's Ki-43-II-Ko had been covered with oil from the exploding C-47 and he thought he had been hit. Rather than crash land in enemy territory, he decided to dive into a suitable target, but when Nango realised that his aircraft had not actually been damaged, he extracted himself from combat and returned to base.

Less than 24 hours later, the 59th was once again back over Tsili Tsili, but this time the Americans were waiting for them. P-38s of the 431st FS and P-47s from the 340th intercepted the incoming force of 33 'Oscar IIs' and three Ki-21s, and although the Americans claimed over a dozen fighters and two single-engined bombers shot down, Japanese losses were restricted to just three Ki-43-II-Kos. Similarly, despite Capt Nango reportedly causing two American fighters to collide, and other 'Oscar II' pilots claiming a further 19 USAAF aircraft destroyed, there were no American losses.

As August progressed the 59th Sentai lost a number of veteran pilots, including two chutai leaders. The unit's Ki-43-II-Heis simply could not compete with the newer versions of P-38 and P-47 appearing in New Guinea, and Japanese morale soon faltered. The lack of supplies and rampant tropical diseases also began to sap the strength of the 59th, and under extreme hardship, Nango began taking over duties for all of the squadrons within the sentai.

On 23 January 1944 Capt Nango was shot down and killed while intercepting B-24s, and their escorting fighters, over Wewak. Ironically, Army HQ had planned to transfer him back to Japan at the end of the month for eventual leadership of the Akeno Fighter School. On 29 April 1944 Shigeo Nango received a posthumous citation and was elevated two ranks to lieutenant colonel. It is believed that he had shot down over 15 American aircraft in New Guinea.

Sergeant Susumu Kajinami

This young pilot has the distinction of being one of the few veteran aces to survive the air battles over New Guinea. Susumu Kajinami was born in October 1923 in Okayama Prefecture and entered the Army in April

1940. In November 1942 he was sent to Kumagaya Flying School, and eventually received his combat training with the 246th Sentai on Ki-27 'Nates'.

In August 1943 Kajinami was assigned to the 68th Sentai and was posted to the 2nd Chutai in Wewak, where he flew the Ki-61 *Hien*. His first claim was a P-40N over Hansa Bay, and during his time in New Guinea fought many types of American aircraft – he considered the P-47 Thunderbolt his deadliest foe. He claimed one such Republic fighter shot down in combat, but was nearly killed himself when another put 29 holes in his 'Tony' whilst chasing him over the jungle.

In February 1944 Sgt Kajinami left New Guinea and was employed until VJ-Day ferrying aircraft between Korea and Tachikawa Air Base in Japan.

By his own reckoning, he shot down the following aircraft – six P-40s, six P-38s, one P-47, two F4Us, three F6Fs, one F4F, two B-24, two B-25s and one unidentified transport aircraft. Kajinami was officially credited with eight kills, plus 16 unofficially.

He changed his name after the war to Koyama, and today is still flying as a commercial pilot from Matsuyama Airfield in Kyushu.



The then Cpl Susumu Kajinami poses next to a Ki-27 of the 246th Sentai at Kakogawa Airfield, in Japan, in 1943 (via S Koyama)



Cpl Kajinami with 2nd Chutai/68th Sentai Ki-61 No 888 at Kagamihara Airfield in the Gifu Prefecture, Japan, just prior to flying out to Wewak in August 1943. Although Kajinami claimed 24 victories while flying the Ki-61, his official score is a more modest eight (via S Koyama)

Captain Shogo Takeuchi

Capt Takeuchi, who was probably the leading JAAF ace over New Guinea, was born in 1918 in Kyoto. He graduated in the 52nd term class of the Army Aviation Academy in September 1939 as a second lieutenant, and was posted to the 64th Sentai.

His unit ranged all over the CBI during the early war years, Takeuchi sharpening his dogfighting skill under the tutelage of the sentai's CO, Maj Tateo Kato, and his 3rd Chutai leader, Capt Katsumi Anma (32 victories). The young protégé of the air group's two distinguished aces developed into a remarkable marksman. Indicative of his budding skill was the dogfight of 31 January 1942 over Singapore that saw his chutai intercept a dozen Hurricane IIs from Nos 232(P) and 238 Sqns, hell-bent on shooting down a formation of Ki-21 bombers being escorted by the 'Oscar' pilots. In the brief dogfight that ensued, Takeuchi quickly dis-

patched three of the Hawker fighters, much to the amazement of Maj Kato.

In April 1942, Lt Takeuchi was transferred to the newly-formed 68th Sentai. The unit converted to the Ki-61 *Hien* later that year, and plans were made to send them to New Guinea. In preparation for the deployment, the sentai spent much of the autumn and winter familiarising themselves with their new mount, and in December Takeuchi took over the 2nd Chutai as a captain.

The 68th Sentai finally arrived at Wewak, via Rabaul, in June 1943, and almost from the start of combat operations, pilots complained about radiator and fuel problems with their new aircraft. The pilots' collective lack of confidence in their fighters was disturbing to Takeuchi, who immediately set about raising morale. On 20 July there was a brief moment of jubilation when the five-aircraft formation from the 2nd Chutai downed a B-24 on a mission to Benabena, this kill providing the unit with its first victory. It also shattered the myth of the Liberator's invincibility.

The daily grind of combat over New Guinea, coupled with the Allied counter-offensive in the autumn of 1943, took a toll on members of the 68th Sentai. Many of its senior officers were killed in action or grounded due to tropical illnesses, whilst aircraft went unserviceable due to a lack of critical spares. Despite these hardships, Capt Takeuchi continued to lead by example, and in October he was wounded in combat and hospitalised for 15 days.

Although grounded by the sentai's medical officer, he left the hospital and declared himself fit for combat, despite being swathed in bandages. Such was the morale-boosting effect of his return to the frontline that groundcrew and officers alike cheered him as he climbed back into his Ki-61, adorned with 58 red eagle victory markings, at the commencement of his first sortie back at Wewak Airfield.

By December 1943 the 68th Sentai had only three pilots left, and Capt Takeuchi's days were numbered. On 15 December US Forces landed at Arawe Peninsula on the southern coast of New Britain Island and the Japanese counter-attacked. Takeuchi escorted light bombers to the enemy landing area, but they were attacked by a large force of P-47s. He reportedly claimed one enemy aircraft destroyed – none were lost – before rushing to the aid of Maj Kiyoshi Kimura (the sentai CO), who was in grave danger of being shot down. Takeuchi managed to save him by fending off the persistent P-47, but he sustained hits to his own aircraft in the process.

Disengaging, the wounded ace retreated alone across the strait towards New Guinea. As he was landing at Hansa Airfield, the engine in his Ki-61 seized and Takeuchi crashed into trees – he was pulled from the wreckage fatally wounded, and died three hours later.

According to Maj Kimura, Takeuchi had flown about 90 missions while in New Guinea and shot down 16 enemy aircraft, with a further ten as probables. Taking his earlier service in the CBI into account, historians state that he shot down, or damaged, over 30 enemy aircraft whilst with the 64th Sentai. Although Takeuchi received a posthumous promotion to the rank of major, a proposed individual citation for distinguished service was not realised.



Another view of Cpl Kajinami, this time whilst he was training to flying Ki-27 fighters at the Akeno Fighter School in April 1943 (via S Koyama)

Maj Shogo Takeuchi was an inspiration to his men, and aside from being an adept fighter leader, he was probably also the leading JAAF ace in-theatre with 30+ kills (via Y Izawa)



HOME DEFENCE

When Lt Col Jimmy Doolittle led a dozen B-25s in the first attack against Tokyo on 18 April 1942, the psychological effect the raid had on the Japanese public far outlasted any material damage inflicted by the Mitchells' meagre bomb load. Not only had the Americans violated the sacred homeland, but the poor state of the nation's air defence system was clearly exposed. It proved to be a source of acute embarrassment for Adm Isoroku Yamamoto, whose naval aviators had failed miserably in their efforts to protect the Imperial capital.

In response to the 'Doolittle Raiders', the Japanese war cabinet's reaction was overwhelming. The JAAF was ordered to recall the 47th Independent Chutai from Burma and place it under the command of the 17th Air Brigade (who also commanded the 5th and 244th Sentais), which had in turn been given the task of defending the Tokyo region. JAAF training schools also participated in home defence patrols, but it would be more than two years before any of these units would get to fire their guns in anger.

By early 1944 the strategic situation in the CBI had deteriorated so badly for the Japanese that Tokyo GHQ deduced correctly that the next bombing raid on Japan would be flown by four-engined bombers from their bases in China before the end of the summer. The target would be industrial sites in northern Kyushu.

Their ominous predictions were proved correct on the night of 15/16 June when 58th Bomb Wing B-29As attacked the Imperial Iron and Steel Works at Yawata on Kyushu. Of the 62 bombers that had set out from bases in the Chengtu area of China, 47 reached

Although principally assigned the task of turning novice aviators into competent combat pilots, instructors from the Akeno Fighter School were also required to support front-line units in the defence of Japan when the need arose. The principal fighter employed by the school in the final years of the war was the 'Oscar II', these examples being Ki-43-II-Kos (via Phil Jarrett)



Natural-metal Ki-44-IIs of the 2nd Chutai/47th Sentai run up prior to taking off on yet another practice interception from Narimasu Airfield in late 1943. Descended from the famous 'Kingfisher' Company that had first blooded the *Shoki* in combat over Malaya in early 1942, the 47th Sentai had been ordered back to Japan in the autumn of the following year to help bolster the defences of the Home Islands (via Phil Jarrett)



A large number of Ki-61-IIb-Kais were also on strength with the Akeno school from early 1944 until war's end, and these advanced Kawasaki fighters proved far more effective against USAAF bomber raids than the more common, but decidedly obsolescent, Ki-43-IIs (via Phil Jarrett)

The third model 2 Ki-44 evaluation prototype is run up at a JAAF airfield on the outskirts of Yokota in mid-1942. Production of the fighter got underway soon after this photograph was taken, and it proved to be quite successful at home defence duties in 1944/45 (via Phil Jarrett)

This mottled *Shoki* models the scheme worn by a number of Ki-44s encountered over the Philippines in late 1944. Indeed, this aeroplane may have ended up fighting in the skies over Clark Field, although at the time the photo was taken in the spring of 1944 it was very much an Akeno-based machine (via Phil Jarrett)



Yawata and bombed the primary target. Twin-engined Ki-45 *Toryu* ('Nicks') from the 4th Sentai sortied to do battle, but of the seven B-29s lost on this mission, none fell to fighters. Nevertheless, the JAAF crews claimed five shot down and five damaged.

Capt Isamu Kashiide, a veteran of Nomonhan, recalls the shock of

encountering the Superfortress for the first time on this historic night;

'I was flying over the industrial area of northern Kyushu. The unit commander gave the order "Enemy planes invading an important area, every flight attack!" At the same time, ground searchlights lit up the sky. Finally, I sighted an enemy four-engined bomber. I was scared. It was known that the B-29 was a huge plane, but when I saw my opponent it was much larger than I had ever expected! There was no question that when compared with the B-17, the B-29 was the Superfortress! The

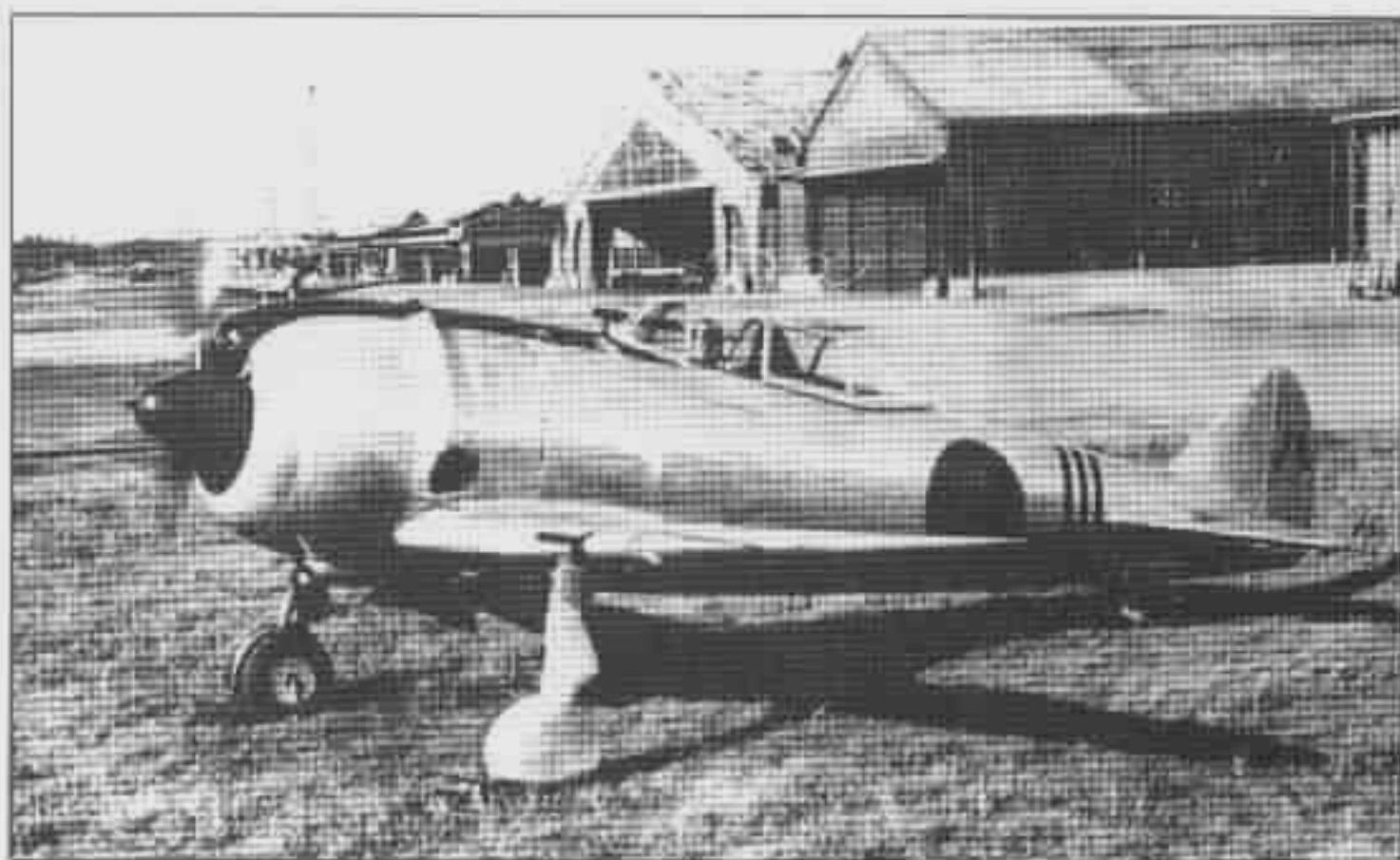


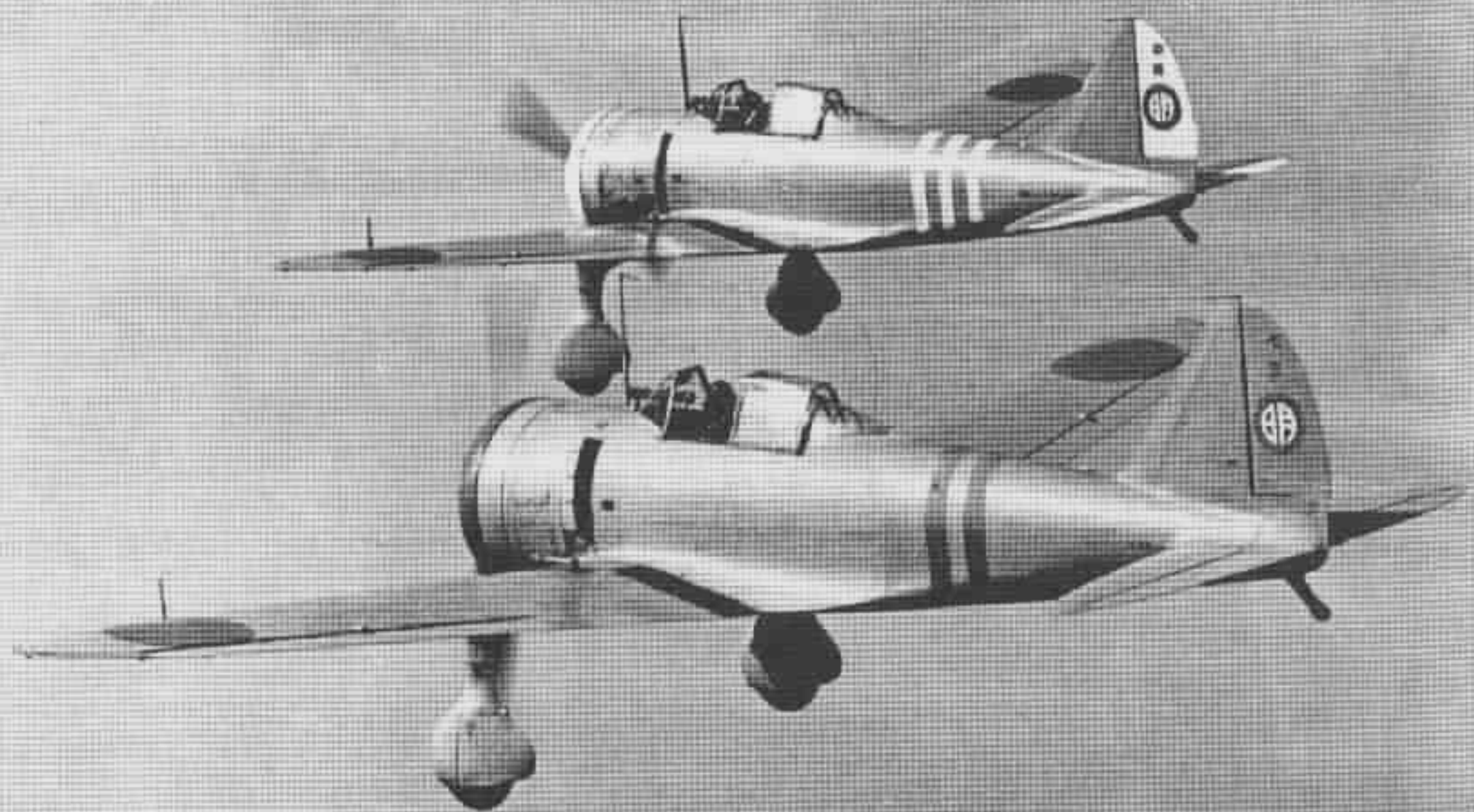
figure that appeared in the searchlight made me think of a great whale in the ocean . . . I was astounded by its size!

After returning to base following this first combat, Kashiide was extremely critical of the small-calibre weapons found on JAAF aircraft:

'Against larger aircraft, the 7.7 mm and 13 mm machine guns proved ineffective. Even the 20 mm cannon did not produce good results. Against B-29s, we armed our planes with the 37 mm anti-tank gun.

"One shot – One hit" was our philosophy.'

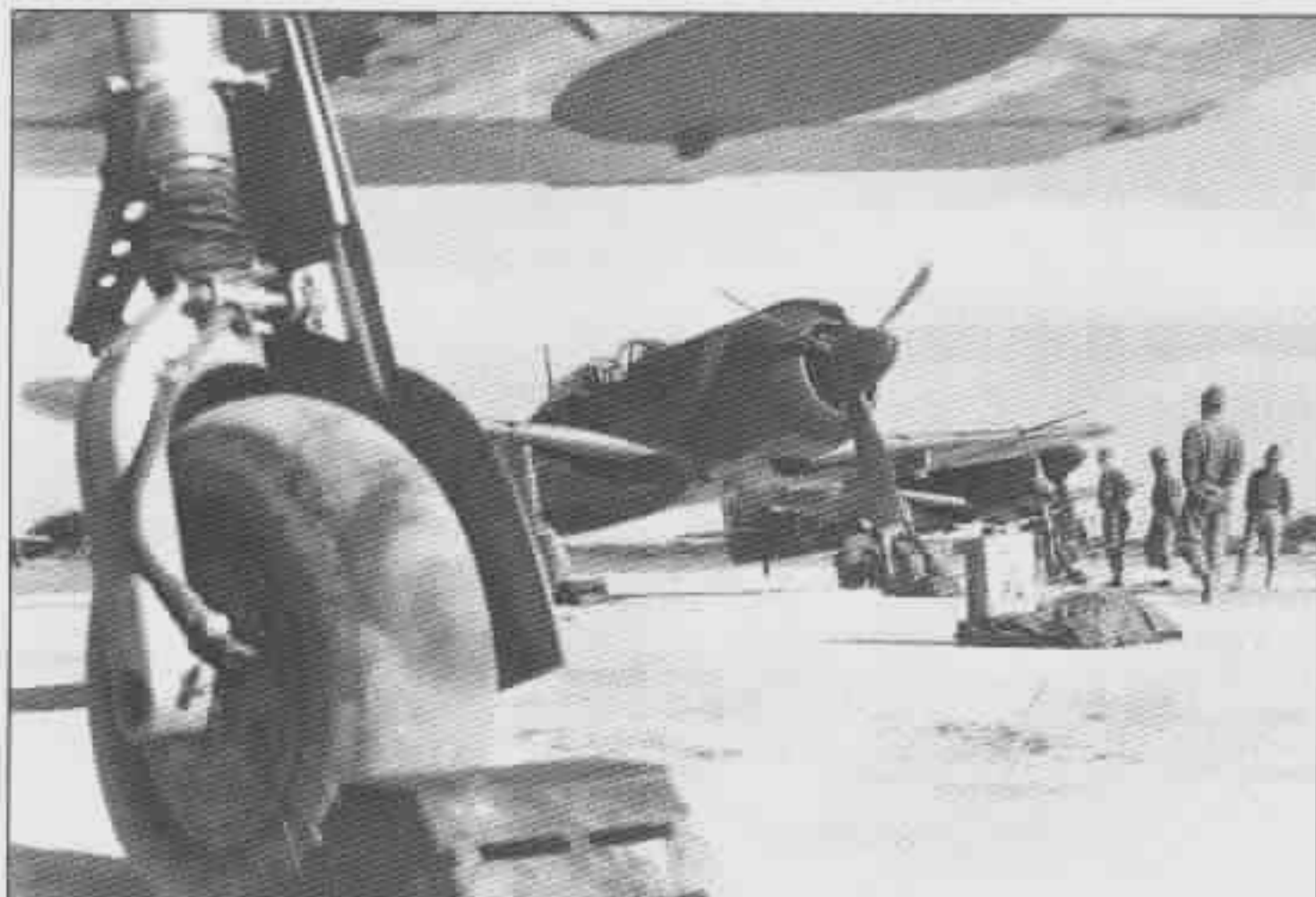
As B-29 raids increased on Japan, the invasion of Saipan began when Marines from the 5th Amphibious Corps landed on Garapan, south of the main island, on 15 June. Two days of heavy fighting resulted in the capture of Isley Field, which would eventually be used by B-29s to bomb the Home Islands.

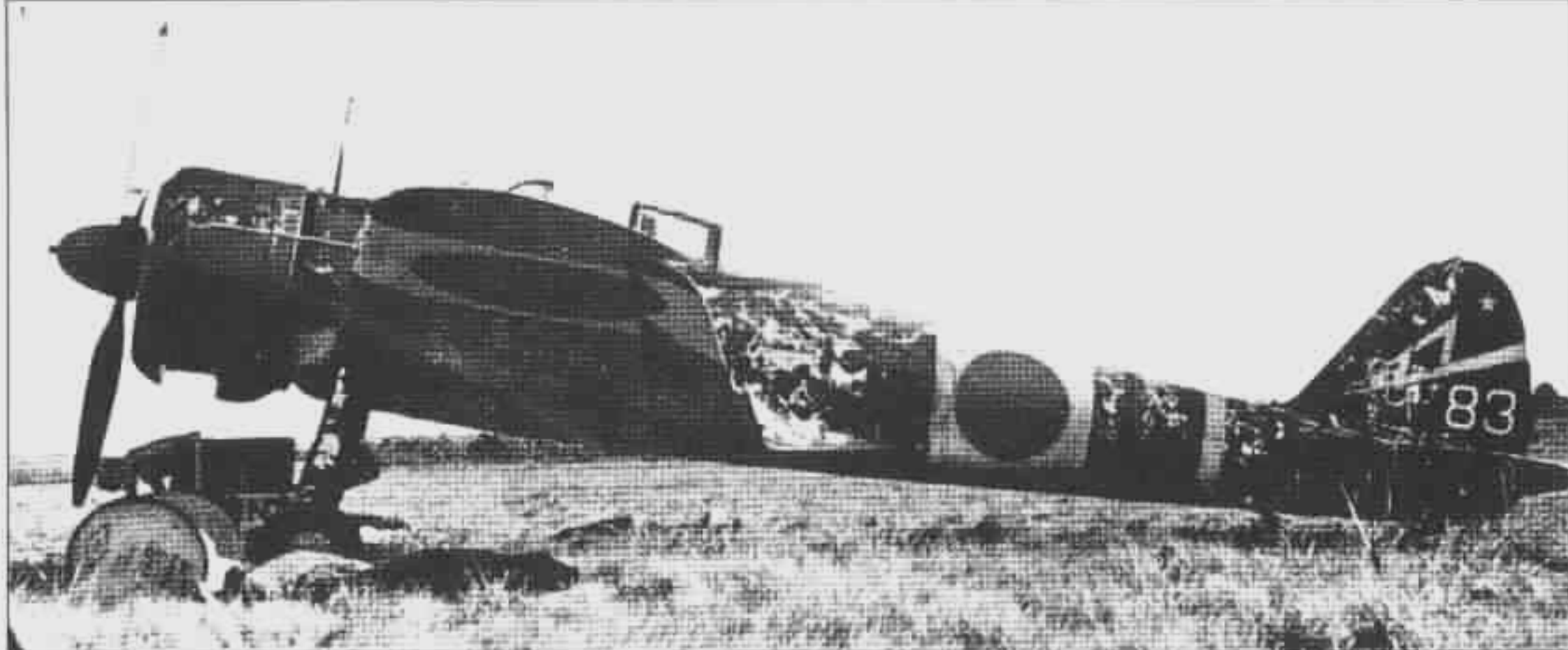


The staple training tool for the Akeno school in the early years of World War 2 was the Ki-27 'Nate', which had been widely replaced in the frontline by the Ki-43 soon after hostilities had commenced. Wearing the distinctive circular badge of Akeno on their rudders, these two Ki-27-Otsus belong to the 2nd (two red stripes) and the 3rd (three white stripes) Chutais respectively (via Phil Jarrett)

Right and below

The Ki-100-I-Otsu was undoubtedly one of the best piston-engined fighters of World War 2, but like a crop of excellent Japanese aircraft, it arrived too late to have any great impact on the eventual outcome of the bomber battles over the Home Islands. These shots show *Goshi-kisen* of the 5th Sentai, based at Kiyoso, north of Nagoya, during the last weeks of the war. 'White 39' was the personal mount of Maj Yasuhida Baba, Hikotai-cho of the 5th, who had previously served as CO of the 1st Chutai between March 1943 and March 1944. Whilst leading the 5th, he had seen his sentai claim 40 B-29s destroyed and a further 100+ damaged – all for the loss of ten pilots killed in action and a further six in operational accidents (both photos via Phil Jarrett)





Hopelessly outclassed by virtually all Allied fighters by this stage of the war, ex-CBI Ki-43-I-Heis were gainfully employed as target tugs for the newer *Shokis* within the 47th Sentai in the autumn of 1943. This photo was taken at Narimasu Airfield, north-west of Tokyo
(via Phil Jarrett)



Another view of the 3rd Chutai/47th Sentai machine seen above, although this time framed by the tail section of a Ki-44-II-Otsu from the same chutai. The latter fighter is having maintenance work carried out on its retraction mechanism
(via Phil Jarrett)

The first daylight bombing of the Japanese mainland by B-29s occurred on 20 August 1944 when the 58th Bomb Wing (BW) returned to Yawata to finish the job. In this engagement, the first intentional air-to-air ramming against a B-29 by a JAAF aircraft occurred. Sgt Shigeo Nobe, of the 4th Sentai, flew his 'Nick' on a collision course with *Gertrude C* of the 794th Bomb Squadron (BS), striking the bomber in the left wing. Both aircraft exploded in flames, and the flying debris struck Capt Ornell Stauffer's *Calamity Sue* a fatal blow. Nobe's destruction of two B-29s resulted in a rare double rank posthumous promotion.

On 1 November 1944 F-13 42-93852 *Tokyo Rose* (B-29 recce variant) of the 3rd Photo Recon Squadron, commanded by Capt Ralph Steakley, flew over Tokyo. It was the first enemy aircraft that had been seen over the Imperial Capital since the 'Doolittle Raiders' of April 1942, and in response to this bold action, Capt Sunao Shimizu of the 47th Independent Chutai led his comrades in pursuit of the intruder in their Ki-44-II-Otsus. However, try as they might, the pilots could not reach sufficient altitude to engage the high-flying F-13, and Capt Shimizu and Matsuzaki could do little more than to point the noses of their respective 'breathless' Nakajima interceptors in the general direction of the Superfortress and fire blindly. The recce aircraft, never in danger of being hit, leisurely cruised away having successfully completed its mission – aerial

This view of a 53rd Sentai Ki-45-KAI-Hei reveals the twin obliquely-mounted 20 mm cannon fitted into the fuselage between the radio mast and the pilot's cockpit
(via Phil Jarrett)



This impressive air-to-air view shows a Ki-45-KAI-Hei of the 3rd Chutai/53rd Sentai out on a patrol from its Matsudo base, on the outskirts of Tokyo, in late 1944. This particular machine wears a red (outlined in yellow) chutai leader's diagonal command stripe across its centre fuselage (via Phil Jarrett)



photos taken during the sortie revealed crowded factories and airfields loaded with aircraft.

The JAAF began its defence of the Philippines on 7 November 1944, and their naval counterparts shocked the American fleet on 25 October when their *kamikaze* aircraft sank the escort carrier USS *St Lo* and damaged six others. The JAAF quickly formed their own suicide squadrons, with many pilots volunteering, or being selected, to crash their bomb-laden aircraft into enemy warships.

Despite the desperate measures employed by pilots in the Pacific, the Allied noose continued to tighten around the Japanese Home Islands. Tokyo GHQ, anticipating a new phase in the aerial bombardment of the mainland, desperately formed five air-to-air ramming sentais within the 10th Air Division on 5 December 1944. These new units were equipped with specially-lightened Nakajima and Kawasaki fighters that had had all unnecessary weight removed in order to maximise their climbing performance.

The deteriorating war situation began to erode the morale of the pilots, and in an attempt to stem flagging spirits, Emperor Hirohito issued an

Imperial edict on 7 December 1944 that established the award of the Bukosho for military merit. In the past, the traditional way of honouring the military dead had been to give the deceased an immediate one rank promotion, whilst the award of the Kinshi Kunsho (Order of the Golden Kite) was bestowed upon the lower ranks.

The Bukosho, which was the

Wearing external fuel tanks so as to increase its range for the impending staged flight from southern Japan to the Philippines, an early-build Ki-84 of the 52nd Sentai taxis out at the start of its hazardous overwater crossing in mid-1944 (via Phil Jarrett)



This gaudily-decorated Ki-45-KAI-Hei was assigned to the 'Shinten-Seiku' ('Special Attack') Shotai of the 53rd Sentai at Matsudo. This elite flight's only method of attack was to ram the enemy, which usually took the form of a B-29 – the fuselage motif denoted the shotai's rather drastic *modus operandi* (via Phil Jarrett)





Seen at Ashiya Airfield, in the Fukuoka Province, soon after VJ-Day, Ki-61-I Otsu No 776 has a unique bomb over a 'Kikusui' (floating chrysanthemum) emblem on its tail. Mysteriously, this motif appears to be newer than the paint applied to the rest of the fighter – the 'Tony' was probably operated by a *kamikaze* flight (via Jerry Scutts)



equivalent of the US Medal of Honor or the British Victoria Cross, broke with tradition through the fact that it could be presented to a living recipient. It could also be awarded on the spot by the unit commander at his discretion. Almost all of the 89 known recipients of the award were aviators, the majority of whom had scored heavily against B-29s over the Home Islands.

The first recipients were Cpl Masao Itagaki and Sgt Matsumi Nakano of the 244th Sentai's air-to-air ramming unit who, on 3 December 1944, had claimed a B-29 apiece in ramming attacks – Nakano managed to land his stricken 'Tony' while Itagaki made a parachute descent.

The initial *kamikaze* suicide attacks held promise, but the Allied Forces quickly countered with combat air patrols. By this stage in the war the quality of JAAF pilots had deteriorated to the point where they could not hope to pierce the overwhelming Allied fighter screen thrown up around the carriers. Hundreds of young pilots were sacrificed many miles short of their targets in a futile attempt to stem the Allied advance toward the Japanese homeland.

Also seen at Ashiya at the same time as 'Tony' No 776, this Ki-61-I provides more of a clue as to the previous owners of the former fighter. This forgotten machine also bears the bomb emblem on its rudder, as well as the remnants of the original 3rd Chutai/59th Sentai diagonal stripe on the fin. The faded red lightning bolt (outlined in yellow) on the fuselage further identifies this *Hien* as the chutai commander's aircraft (via Jerry Scutts)



Ki-84s of the 102nd Sentai jockey for position as they prepare to take-off on yet another sortie in late 1944. This unit was one of the most unsuccessful late war sentais in the JAAF, failing to score even a single victory during numerous home defence patrols over Japan between December 1944 and March 1945. It did, however, contribute six pilots to the *kamikaze* operations off Okinawa (via K Osuo)



Ki-84 *Hayates* of the 2nd Chutai/73rd Sentai in late 1944. Hastily organised and rushed into service in May 1944, this unit had been virtually destroyed by March 1945 following a series of one-sided actions in the Philippines. This aircraft has been left unpainted except for the black anti-glare panel along the nose and the sentai marking on the tail (via K Osuo)

The JAAF's Okinawan Campaign began on 14 January 1945 and continued well into July, although within weeks of the offensive commencing, it soon became obvious to both air force commanders and frontline pilots alike that its outcome would be little different to the disaster recently experienced in the Philippines. Employing tactics that had worked a treat in the latter battle, Allied forces began targeting airfields in Kyushu that were being used as launching points for *kamikaze* flights.

All the while the bombing campaign aimed at the Japanese mainland was increasing in its intensity. Indeed, if one raid could symbolise the 'beginning of the end' for Japan it would be the devastating 'fire bomb' attack flown on the night of 9/10 March 1945, for it saw the USAAF bomber force embrace 'total war' on a broad scale for the first time.

The reason behind the change in the tactics employed by the Americans was simple – air force generals were becoming increasingly alarmed at the growing number of losses being inflicted on the B-29 force by the combination of Japanese fighters and intense flak, particularly in light of



Akeno Fighter School Ki-44 *Shokis* seen openly parked on the ramp in March 1944, prior to bombing raids forcing the widespread dispersal of all JAAF aircraft (via K Osuo)



B-29 'killers' of the 4th Sentai pose together for a photo at Ozuki Airfield in Yamaguchi Prefecture, Japan, in early 1944. Back row, left to right, Sgt Shigeo Nobe (destroyed two B-29s in the first ramming attack by JAAF), Sgt Hannoshin Nishio (five victories), and Sgt Shinji Mori. Front row, left to right, Sgt Minoru Uchida (three victories) and Lt Isamu Kashiide (26 victories) (via H Sakaida)



The Bukosho (B Class depicted) was Japan's equivalent of the British Victoria Cross or the American 'Medal of Honor'. Most were awarded to pilots who were successful against the B-29s (via *H Sakaida*)

1Lt Toru Shinomiya (left) and Sgt Masao Itagaki both claimed to have destroyed a B-29 apiece through ramming on 3 December 1944 over Tokyo. They belonged to a specialist unit within the 244th Sentai which specialised in such extreme methods of attack, and although Itagaki was forced to abandon his stricken Ki-61 moments after hitting his target, Shinomiya somehow managed to return to base with a large chunk of his port wing missing – as can be clearly seen here. Both were awarded a Bukosho each for their daring feats of bravery (via *M Katoh*)

the fact that bomber crews were failing to consistently hit pin-point industrial targets from high altitude.

Operational tactics had to be altered, and these changes were instigated when Gen Curtis LeMay arrived in-theatre to take over control of XXI Bomber Command from Gen Haywood Hansell in late January 1945. Having studied the poor results being achieved by the command, he decided that precision attacks were too difficult for his crews to prosecute, and reasoned that the destruction of generalised urban targets would achieve better results. He also decided that these raids should be flown at night in order to increase the protection available to his bombers. By using the cover of darkness to help hide their position, raiders could also reduce their attacking altitude (down to 7800 ft on the Tokyo mission) in order to improve weapons drop accuracy, thus alleviating the problems posed by severe jetstreams encountered at high altitude – these had



plagued daylight operations since they had commenced in mid-1944.

Finally, in order to maximise the damage inflicted on the timber buildings that proliferated in the urban areas of Japan, it was obvious that the type of weapon used had to be changed from high explosive munitions to an incendiary device like the recently developed 500-lb 'pyrotechnic gel' bomb. These had been dropped in small numbers on earlier raids, but on this occasion many more rained down on Tokyo than had ever been pre-

viously deployed, resulting in 16 square miles of the city being gutted at a cost of over 100,000 lives. Fourteen B-29s were lost to all causes.

Now that the USAAF had switched to night raids, the bombing onslaught could not be stemmed by Japanese air defences. A number of 'quick fix' types were rushed into service as nightfighters, including the twin-engined reconnaissance Mitsubishi Ki-46 'Dinah' fitted with obliquely-mounted 20 mm cannon installed to fire into the undersides of the bombers – it achieved little success, however. A small batch of Ki-44s



The 55th Sentai's 2Lt Takeo Adachi, and his crew chief Sgt Kanzaki, paint a victory mark on his Ki-61 'Tony' following his success on 3 January 1945. Adachi was killed in aerial combat over Nagoya some 16 days later (via *Y Izawa*)



This Ki-100 *Goshikisen* of the Akeno Fighter School was flown by 1Lt Mamoru Tatsuda on the famous 16 July 1945 dogfight over Nagoya Bay when the instructor's flight was led into combat against P-51Ds of the 457th and 458th FSs by Maj Yohei Hinoki (via *Y Hinoki*)

Below left

Pilots and observers of the 4th Sentai at Kozuki Airfield in Yamaguchi Prefecture, Japan, in January 1944. Capt Masaji Kobayashi (CO) returns his mens' salute before their training sortie (via *Maru*)



Below

Pilots of the 4th Sentai are interviewed by a newspaper reporter on the afternoon of 16 June 1944. The previous night B-29s from the 58th BW had raided northern Kyushu – the first Superfortress raid on the Japanese mainland. Although the 4th Sentai claimed five shot down and another five damaged, none were actually lost. Left to right: Capt Kobayashi, Maj Isao Abe (CO of the sentai), chief of staff of the 19th Air Brigade, 1Lt Isamu Kashiide, Capt Toshio Sassa and WO Sadamitsu Kimura. The newspaper reporter has his back to the camera (via *Y Watanabe*)



To bolster morale in the 70th Sentai, pilots painted victory markings on their Ki-44 'Tojos'. Here, MSgt Kitao Osakabe stands alongside Sgt Sadao Miyazawa's aircraft, the latter having downed a Hellcat on 17 February 1945 in this machine (via K Osakabe)



Maj Toshio Sakagawa was a tough fighter leader of the 25th Sentai in China between November 1942 and July 1944. In that time he reportedly downed 49 enemy aircraft, before being transferred back to Japan to serve as executive officer of the newly-formed 200th Sentai, equipped with the Ki-84. Sent to the Philippines soon after their establishment, the unit was badly mauled by USAAF and US Navy fighters. Ironically, Sakagawa himself was not lost in combat, but was instead killed when the transport aircraft he was a passenger on crashed on 19 December 1944 (via Maru)



Eight-kill ace Capt Tsutae Obara of the 244th Sentai paints a victory marking on his Ki-61. He was killed on 25 July 1945 over Yokaichi Airfield when his chutai fought a swirling dogfight with Hellcats from VF-31. Whilst attempting to evade a chasing F6F-5 in his Ki-100, Obara collided with yet another US Navy fighter flown by Ens Ed White. Both pilots were killed instantly (via H Sakaida)



were outfitted with monstrous 30 and 40 mm cannon mounted in the wings, but the dramatic increase in weight associated with these 'field pieces' made the 'Tojos' almost impossible to manoeuvre once aloft. Aerial burst bombs were also dropped on bomber formations, although with dubious results.

The ceaseless haemorrhaging of aircrew in both suicide and conventional attacks had also begun to take its toll on frontline JAAF units by the early spring of 1945. In the past it had been the policy of the army to utilise wounded veteran pilots in the role of instructors once they had recovered, but now that the frontline had arrived at Japan's 'doorstep', these seasoned aviators were unleashed on the enemy once again.

Men like Capt Yohei Hinoki, who had lost his right leg to a Mustang in Burma in late 1943, took up the challenge of engaging hordes of B-29s as they sortied over his base. Sgt Yukio Shimokawa had had an eye shot out over Burma by a B-24 in the autumn of 1943, but this disability was ignored as he sought out the enemy whilst ferrying fighters to the outlying islands in 1945. Similarly employed delivering replacement 'Franks' (this time to the Philippines in late 1944), combat-weary Sgt Satoshi Anabuki proved he too had not lost his touch by downing six Hellcats.

The final wartime duty performed by these hard-core veterans of countless dogfights in China, Burma and New Guinea was to invariably lead young trainees with minimal flying experience to their deaths in the skies over Japan as they vainly attempted to defend their homeland.

To add to the JAAF's problems US Navy aircraft appeared over Japan for the first time on 16-17 February 1945 during a two-day assault which wrecked airfields in the Tokyo area. Those Japanese pilots unfortunate enough to be flying 'Oscar IIs' and 'Tojos' were hard-pressed to survive attacks by F6F Hellcats and F4U Corsairs.

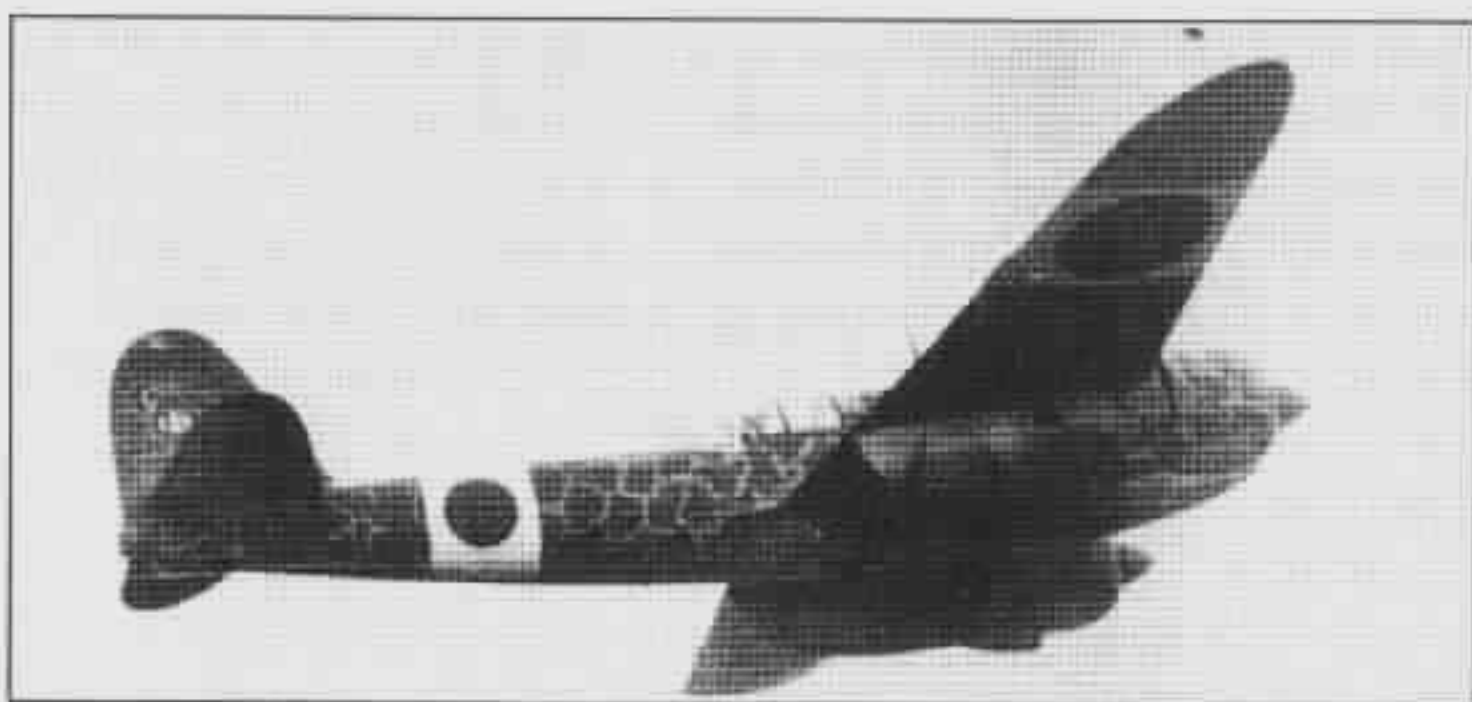
The fall of Iwo Jima only caused more headaches for home defence pilots as American single-engined fighter aircraft could now escort the B-29s to their target and back. The first such mission occurred on 7 April 1945 when 7th Fighter Command P-51Ds escorted 73rd BW B-29s to Tokyo, the Mustang 'jockeys' claiming 26 victories in the morning skirmish alone. On subsequent missions P-47D/N Thunderbolts joined in, and just as the Luftwaffe's Bf 110 and Me 410 'heavy' fighters had proven

no match for USAAF single-seater types in the skies over western Europe, so twin-engined JAAF interceptors like the 'Nick' became easy prey for US pilots.

Two Japanese types that proved to be anything but cannon fodder for USAAF fighters were the Ki-84 *Hayate* (Gale) and the Ki-100 *Goshikisen*. With skilled pilots at the controls, both aircraft could more than hold their own against the



Ki-100-I-Ko *Goshikisen* of the 1st Chutai of the 59th Sentai sit in readiness for a rapid scramble from Ashiya Airfield in Fukuoka Prefecture, Japan, in June 1945. Known as the 'Tony II,' the Ki-100 was basically a K-61 airframe outfitted with a Mitsubishi Ha-112-II 14 cylinder, air-cooled, radial engine. The Ki-100-I-Ko was the most common *Goshikisen* of them all, with some 272 airframes having been built by war's end (via Maru)



A Ki-45 *Toryu* of the 4th Sentai takes off to do battle with B-29s over Kyushu in late 1944. Originally designed as a long-range escort fighter, the 'Nick' failed miserably in its intended role due to its lack of performance when compared with more agile Allied fighters. However, it made its mark as a B-29 interceptor, particularly under the cover of darkness (via H Sakaida)

feared Hellcat, Corsair or Mustang. However, the 'Frank' never arrived in sufficient numbers to offer anything but a token resistance, and likewise Kawasaki's Ki-100 (essentially a Ki-61 'Tony' airframe fitted with a 1500-hp Mitsubishi Ha-112-II radial engine) only began to enter service after March 1945. Although these aircraft were capable of inflicting severe damage on B-29 formations, the efforts of the few who got to fly them in combat were quickly thwarted after April 1945 by overwhelming numbers of escort fighters.

The last major combat between the JAAF and the Americans occurred on 25 July 1945 when 18 Ki-100s of the 244th Sentai encountered ten F6F-5 Hellcats of VF-31 over Yokaichi Airfield on an early-morning raid. In a fierce dogfight, Capt Tsutae Obara (eight kills) collided with Ens Edwin White and both were killed. Soon after WO Shin Ikuta and Ens Herbert Law were downed, the former dying in the subsequent crash, but Law surviving to return to the America from a POW camp after the war.

The 244th claimed 12 Hellcats destroyed for the loss of two pilots, whilst VF-31 counter-claimed with eight kills and three probables for the loss of two. As the most successful home defence unit of the war, the 244th Sentai ended the conflict with claims of 102 B-29s shot down and 192 damaged.



Capt Chuichi Ichikawa (see page 80), pictured here as an aviation cadet in 1937, was one of just a handful of pilots to survive combat over New Guinea and return to Japan to fight in the home defence. He won the Bukosho for downing nine B-29s whilst flying with the 244th Sentai (via Y Izawa)

Capt Nagao Shirai (see page 81) became the top ace of the 244th Sentai whilst serving as leader of the 3rd Chutai. He joined the unit soon after its formation in 1942, and served exclusively with this sentai. Postwar, Shirai shunned publicity and refused to talk about his combat career, thus relegating him into historical obscurity (via H Sakaida)

Major Teruhiko Kobayashi

Teruhiko Kobayashi became a dashing hero in the latter part of the Japanese home defence. Born in 1920, he had entered the Army Military Academy in the late 1930s and graduated in the 53rd Class. Initially appointed as a second lieutenant in artillery, Kobayashi soon changed courses to light bombers and was assigned to the 45th Sentai upon graduation.

On the opening day of the Pacific War he participated in the bombing of Hong Kong, and by April 1943 had become a seasoned veteran of many operational sorties with the 66th Sentai in Manchuria. When the air group enlarged, he decided to convert to fighters and was posted to the Akeno Fighter School. A promotion to captain came in November 1943, and upon the completion of his course in June 1944, Kobayashi was retained in Japan to serve as education officer with the school.

In the latter part of November 1944 he became an assistant to the commander of the 244th Sentai, this unit becoming the darling of the general public as it strove to defend Japan from enemy bombers. Armed with the sleek Ki-61-I-KAI *Hien*, the unit provided protection for the Tokyo area from their base at Chofu Airfield in the western suburbs of the city.

At the age of 24, Capt Kobayashi became the youngest air group commander in the JAAF, leading the sentai by example. His unit gained considerable fame against the B-29s, and by war's end the 244th Sentai could boast a number of Superfortress 'killers'.

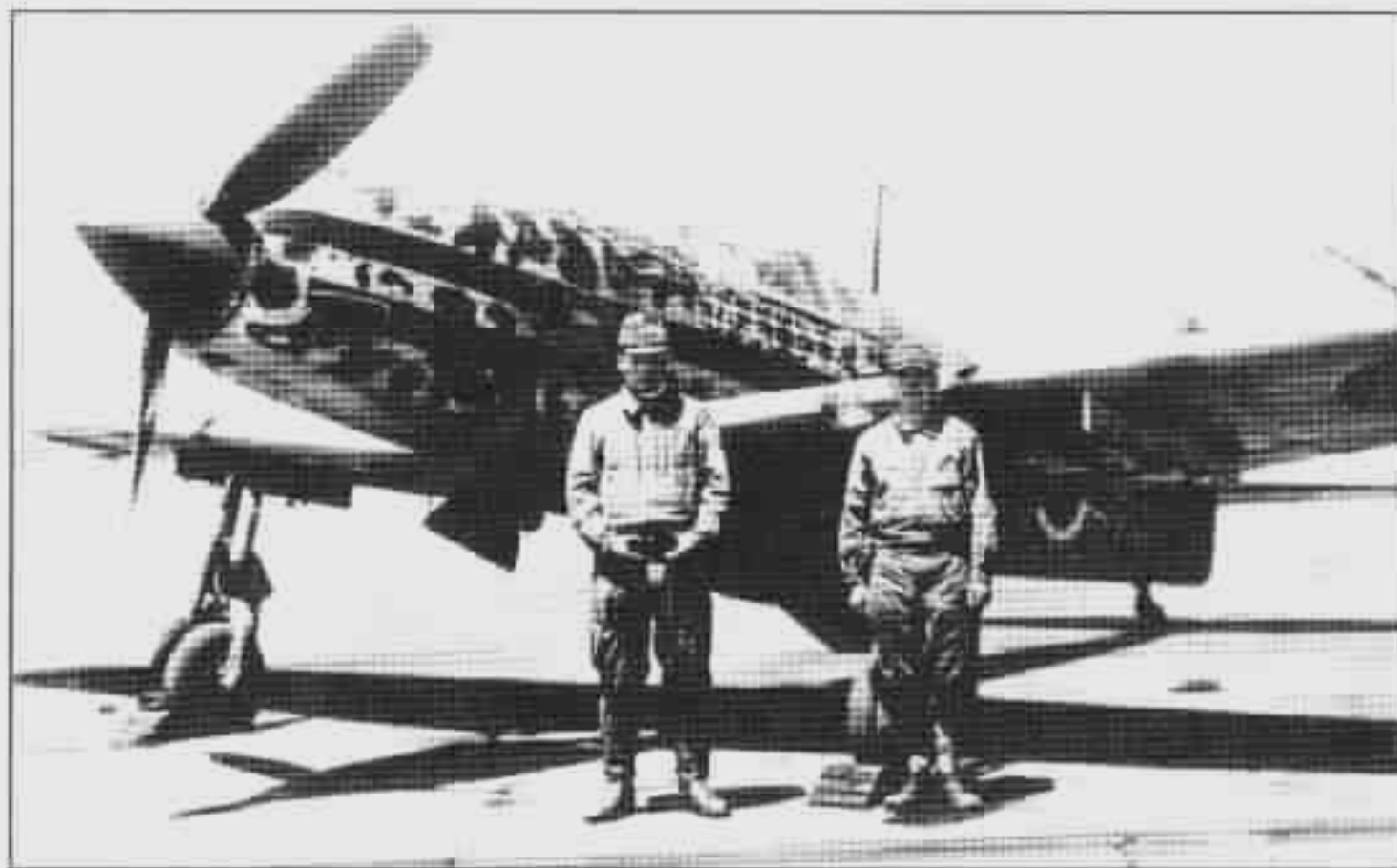
Kobayashi himself shot down a B-29 in a single pass on 3 December 1944, while his group claimed six additional aircraft on the same sortie through ramming attacks (all the pilots survived). On 22 December he damaged a B-29 over Akumihan Island and then on 9 January he damaged another Superfortress, although on this occasion his *Hien* was hit by return fire and he was forced to make an emergency landing. Eighteen days later Kobayashi destroyed a B-29 through ramming, escaping death by taking to his parachute – his only injury was a cut over his nose.



Capt Teruhiko Kobayashi poses for an official photograph to celebrate his receiving the Bukosho (pinned to his left chest) in May 1945 (via H Sakaida)



This beautifully painted Ki-61-I-KAI *Hien* of the 244th Sentai shows the spirit of the unit through its distinctive markings. It also sports the silhouettes of 12 B-29s and two Hellcats under the cockpit, thus denoting that it was flown by sentai commander, Capt Teruhiko Kobayashi. The air group operated from Chofu Airfield on the outskirts of Tokyo, and received much publicity during 1944-45 for its heroic struggle against B-29s over the Imperial capital (via Maru)



Kobayashi and his crew chief pose in front of his 'Tony' (via Maru)

The exploits of the 244th Sentai were published daily in newspapers at the time, and Kobayashi's fame continued to grow. On 12 April he damaged yet another B-29, but was wounded in the leg by return fire and forced to take to his parachute once again. The following month his unit received a letter of commendation from the Army High Command, and at the same time his deeds were recognised by the award of the Bukosho.

On 25 July Maj Kobayashi disobeyed orders by taking off to intercept marauding Hellcats over Yokaichi Airfield, having been instructed to stay on the ground to await incoming bombers. He and his men were by this late stage in the war flying the superlative Ki-100 *Goshikisen* (Type 5 Fighter), and as previously noted in this chapter, in the dogfight that took place at hangar-top height, the 244th Sentai pilots reportedly shot down ten of the VF-31 Hellcats that had sortied over Japan from the carrier USS *Belleau Wood* – the real score was just two for two on both sides.

Newspapers trumpeted the rout, but a court martial was planned for the young commander, which carried a very serious penalty. However, news of his great deed reached the Emperor, and words of Imperial approval were spoken in respect to Kobayashi's actions – the court martial was quickly dropped.

Maj Kobayashi scored five victories in total (three B-29s and two F6F Hellcats), although postwar Japanese historians have erroneously credited him with 10 B-29s and two fighters. This latter score, which would have made him the top JAAF B-29 'killer', is based on self-serving statements by Kobayashi's widow and photos showing numerous victory markings on his aircraft. Extensive investigation by Japanese historian Takashi Sakurai has subsequently shown that the lower score is correct.

After the war, Kobayashi joined the Self-Defense Air Force, but on 4 June 1957 was killed in a training accident when the T-33 he was flying crashed on approach to landing at Hamamatsu Air Base in bad weather. He had earlier ordered his subordinate to eject from the aircraft when it had developed a technical problem in flight. Teruhiko Kobayashi remained a hero to the end.

Captain Yoshio Yoshida

Yoshio Yoshida was one of the top B-29 'killers' of the JAAF. Born in 1921 in Hiroshima City, he entered the 55th Class of the Army Officers' Flight Academy in 1939, and upon graduation in March 1942 was sent to the Akeno Fighter School for additional training prior to being posted to the 70th Sentai.

When the USAAF's 20th Air Force sent 96 B-29s to attack targets in Anshan, Manchuria, for the first time on 29 July 1944, the 70th Sentai was transferred into the region the following month so as to provide some form of defence for the Japanese colonial territory – the air group was equipped with the Ki-44-II-Hei.

On 8 September a force of 108 B-29s raided Anshan for a second time, and in the subsequent engagement between the Superfortresses and the 'Tojos', 1Lt Yoshida managed to claim one as a probable.

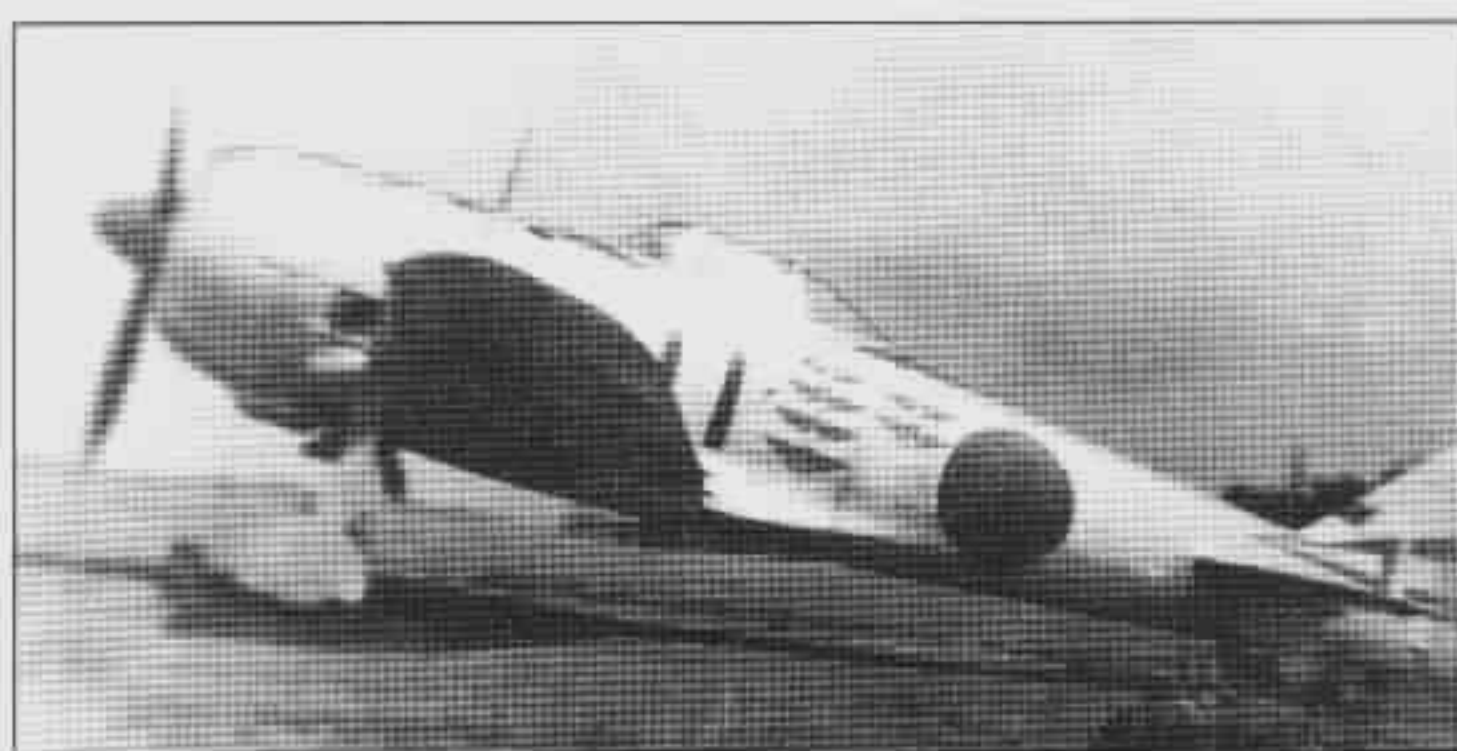
The thundering hordes of B-29s started to raid the Tokyo region in November 1944, and in an attempt to counter the menace, the 70th Sentai was transferred back to Kashiwa Airfield, near the capital, where they swapped their near-useless 'Tojos' for the far superior Ki-84 'Frank'.



Two views featuring Kobayashi in different Ki-61-I-KAs at varying stages in his career. The top shot shows a scoreboard denoting six B-29 kills, with the last one further embellished with a red Ki-61 silhouette to denote that it was achieved through ramming – this combat took place on 27 January 1945 over Mt Fuji. The second photo reveals a different style of victory marking application. Kobayashi did not differentiate between destroyed and damaged in his kill markings, and the reasoning behind a solid white silhouette as opposed to just an outline is unclear (*both via Maru*)

Capt Yoshio Yoshida stands proudly by his Ki-44. The two victory markings are dated 13 and 15 April 1945, and are detailed with both his name and rank. He claimed six B-29s and one probable (*via Maru*)





Capt Yoshio Yoshida's 70th Sentai Ki-44-II-Hei is seen sporting six victory markings at Kashiwa Airfield, near Tokyo, in June 1945. Its pilot scored his last victory on 25 May 1945 in a night action over the capital that saw the USAAF's 20th Air Force lose 26 B-29s to all causes. This proved to be the costliest Superfortress mission of the entire war in terms of aircraft downed (via Y Izawa)

Yoshida was given command of the 3rd Chutai in February 1945, and immediately began to hone his attacks against the four-engined bombers. On 13 April he shot down a B-29, followed by another two days later, and then between 10 March and 25 May Yoshida claimed six Superfortresses in night actions. As a result of his extraordinary successes, the award of the Bukosho was bestowed upon him.

As the second-highest B-29 'killer' of the 70th Sentai, Yoshida score totalled six bombers destroyed and one probable. He is now deceased.

Warrant Officer Tadao Sumi

Tadao Sumi was born in 1916 in Gifu Prefecture. He joined the army in the mid-1930s, and had seen service as an infantryman during the sieges of Shanghai and Nanking prior to transferring to flight training in February 1941. Sumi graduated in November of that year, and was eventually assigned to the air defence of the Tokyo region with the 244th Sentai when it formed in the aftermath of the Doolittle raid in April 1942.

It wasn't until Sumi started flying against B-29s towards the end of 1944 that he became a hero in the eyes of the Japanese public. Having joined the Ki-61-equipped 56th Sentai just prior to the first raids, he subsequently fought the B-29s on a near-daily basis until war's end.

Sumi's greatest moment came during a series of night action fought on 13 March 1945 over Osaka, the master sergeant making repeated lone attacks on the B-29 force. He succeeded in shooting down four bombers, and damaging three others, before he was forced to take to his parachute when his Ki-61 ran out of fuel. However, as he undid his straps and prepared to vacate his fighter, Sumi became disoriented through an attack of vertigo. This momentarily delayed his jump to the point that when he did part company with the Ki-61, he struck his shoulder on the tailplane as the aircraft flew on. Sumi was forced to spend three months in hospital recuperating.

In recognition of his heroic deed, Gen Kawabe, commander of the 15th Military District, awarded the warrant officer a letter of commendation. On 21 June 1945, Sumi received the Bukosho (Medal of Honour, A Class – he was one of the very few recipients to receive the highest grade of this decoration).

Sumi went back into combat later that month, and despite being wounded again, continued to fly. By war's end he had downed five B-29s and damaged four more, plus destroyed a P-51. He passed away on 25 July 1985.



WO Tadao Sumi was one of just a handful of pilots to earn the Bukosho, A Class, which was awarded following his destruction of four B-29s in a single night mission over Osaka on 13 March 1945 (via Y Izawa)

Captain Fujitaro Ito

Although a relative unknown when compared to the more famous B-29 'killers' profiled in this chapter, Capt Fujitaro Ito may just be the top four-engined bomber destroyer of the entire JAAF. Born in 1916 in Fukui Prefecture, he enlisted in the Army in the mid-1930s and initially served in the 36th Infantry Regiment. In April 1939 he entered the NCO flight training course, and duly graduated from Kumagaya Flying School in December. Ito was then posted to the 5th Sentai, a unit with which he stayed until war's end.

Having seen several years of frontline service with this sentai, Ito then entered the Aviation Commissioned Officers' Academy as a candidate for second lieutenant in June 1942. He graduated in November of that same year, and three months later received his commission.

In July 1943 Ito departed with his unit for duty south of Java, and was engaged in various combats. By 19 January 1944 the 5th Sentai was based at Rian Air Base, on Ambon Island, in the East Indies. The unit had been equipped with the Ki-45 prior to deploying to Rian, thus becoming the first sentai in the JAAF to receive the new heavy fighter in the process.

Ito's first combat with the 'Dragon Slayer' occurred soon after his arrival in the East Indies, his chutai responding to a surprise raid staged by a formation of B-24s on the airfield. Seven Liberators fell to the heavily-armed Ki-45s, three of them to 2Lt Ito and his observer, Sgt Masanori Nozaki. They had taken on a four-bomber formation and quickly despatched a trio of B-24s using the fighter's 37 mm cannon. His own aircraft was hit in the right engine, however, and they were forced to make an emergency landing at Seramu Island. Due to the bravery shown in the face of overwhelming odds, both Ito and Nozaki received personal commendations from Gen Tsukuda, the regional air commander.

In mid-May 1944, Ito and Nozaki again encountered enemy bombers, but this time their 'Nick' was hit before they could inflict any damage on the formation. They were forced to make an emergency landing in the sea, but were quickly rescued. Ito later flew air defence patrols around Nanking before returning to Japan.

In December 1944 Marianas-based B-29s started to attack Nagoya, and the recently-promoted 1Lt Ito was in the vanguard thrown up by the JAAF in an attempt to thwart their efforts. Over the next eight months he would tackle USAAF bombers in Ki-45s, Ki-61s and finally Ki-100s. In January 1945 he took control of the 3rd Chutai, and proceeded to lead it until the end of the war – he had shot down more than nine B-29s by VJ-Day. In light of his efforts in the final desperate months of war, Ito was awarded the Bukosho on 7 July 1945.

Capt Ito shot down more than 13 enemy aircraft, all of which were bombers. He passed away on 15 May 1983.

Captain Isamu Kashiide

Known as the 'King of B-29 Killers', Isamu Kashiide's name became well known in the JAAF during the latter part of the home defence campaign. Born in 1915 in Niigata Prefecture, the young Kashiide's boyhood dream of becoming a fighter pilot became a reality when he entered aviation



Capt Fujitaro Ito became a four-engined specialist over Japan, knocking down at least three B-24s and nine B-29s whilst flying Ki-45s, Ki-61s and finally Ki-100s with the 5th Sentai. After the war, he became a proud member of Lions International (Japan) (via F Ito)



Capt Isamu Kashiide became famous as the 'King of B-29 Killers', and he is seen here wearing an electrically-heated flight suit. Such gear was mandatory when engaging B-29s at very high altitudes in the freezing skies over Japan (via Y Izawa)

Capt Kashiide's Ki-45-KAI-Hei at Kozuki Airfield in 1945. He believed in hunting 'big game' with a 'big gun', his aircraft boasting a Ho-203 semi-automatic recoil-operated 37 mm anti-tank cannon. This weapon was fed from a magazine that held just 25 rounds, so every shot had to count. Nevertheless, this combination was considered by many within the JAAF to be the most effective at countering the B-29 threat (via Y Izawa)



school in February 1934. He graduated in November of the following year, and then joined the 1st Air Regiment.

In July 1938 Kashiide was assigned to the 59th Sentai in northern China, but by the time he arrived in-theatre there was no opportunity for him to experience action against the Chinese Air Force. However, in September of the following year his Ki-27-equipped unit went to Nomonhan, and this time he saw enough combat to make up for the disappointment of the year before. On the very last day of fighting he became involved in a *mélée* with eight I-16s and managed to shoot down two of his assailants, although he was nearly shot down himself.

At the end of the Nomonhan Incident, Kashiide returned to Hankow, in central China, with seven victories to his credit. He was assigned to the Formosa-based 4th Sentai in the spring of 1940, and the outbreak of the Pacific War found him performing air defence duties in obsolescent Ki-27s. Within weeks his unit was taking part in the invasion of the Philippines, although the sentai returned to Kozuki Airfield, in Japan, before Kashiide could add to his Nomonhan tally.

The 4th Sentai was equipped with the Ki-45 *Toryu* in mid-1943, but the twin-engined fighter escort soon proved to be ill-suited to its designated role. However, when outfitted with a 37 mm cannon in the nose and rear-upward firing 20 mm weapons in the fuselage, the Kawasaki type indeed metamorphosed into a 'Dragon Slayer'.

As mentioned earlier in this chapter, on the night of 14/15 June 1944 China-based B-29s commenced their first attacks on the Japanese homeland. Their mission was to destroy the Imperial Steel and Iron Works at Yawata, and opposing them was 1 Lt Kashiide and his squadron, amongst other JAAF units. Once the resulting interception was over, he reported having shot down two bombers, and was uncertain about the fate of a third. Kashiide followed up this success on 20 August when he claimed three B-29s shot down and a further trio damaged during a daylight raid.

He soon developed his own style of combat through countless encounters with the Superfortresses, and drilled his subordinates hard in his unique teachings. Years after the war had ended, Kashiide recalled the following instructions:

'Manoeuvre from within 1000 meters. The B-29s have 13 machine guns – in a head-on attack, you will be faced with 10 of them. I will always fly in front and I will always be the first to attack. I am showered with tracers every time. Tracers coming toward you in a criss-cross pattern are very frightening. I feel that my vision is shot away in the screen of bullets. It is not a good feeling to have. In such cases, close your eyes and count to three. When you open your eyes, the enemy will be within 200 metres of you. Adjust your sight to within 150 to 200 metres of the target. At 100 metres, lower your plane. At 80 metres, fire, then dive your plane quickly – go straight down.'

On 27 January 1945 Kashiide shot down a B-29 of the 878th BS/499th BG over Tokyo, a 37 mm round hitting 'T Square 27' *Rover Boy Express* squarely in the nose.

One of the crewmembers that managed to bail out of the stricken B-29 was a young 22-year-old navigator by the name of Raymond 'Hap' Halloran.

For distinguished service against hordes of B-29s, 1Lt Kashiide received the Bukosho on 8 May 1945 from Lt Gen Isamu Yokoyama. His citation read;

'This distinguished person, on 27 March 1945, at the time of the assault of northern Kyushu by American Air Force B-29s over the air of the protected area, carried on his daredevil attack, shooting down three B-29s and damaging others, and achieved this glorious result. His actions were based on severe fighting spirit and techniques which enabled him to defeat many enemy planes. His feat glorifies the spirit of the Imperial Army combat squadrons. His military record is outstanding. Therefore, he is hereby awarded the Bukosho B Class.'

By war's end Kashiide had claimed to have destroyed 26 B-29s over Japan, plus of course the seven Soviet fighters he had shot down at Nomonhan. His score is widely disputed by historians and former pilots alike, and today it is widely believed that he scored no more than seven B-29s, plus two fighters in 1939. Even if this were true, it was still an incredible accomplishment since most JAAF pilots agreed that it was almost an impossible task for a single pilot to bring down a B-29.

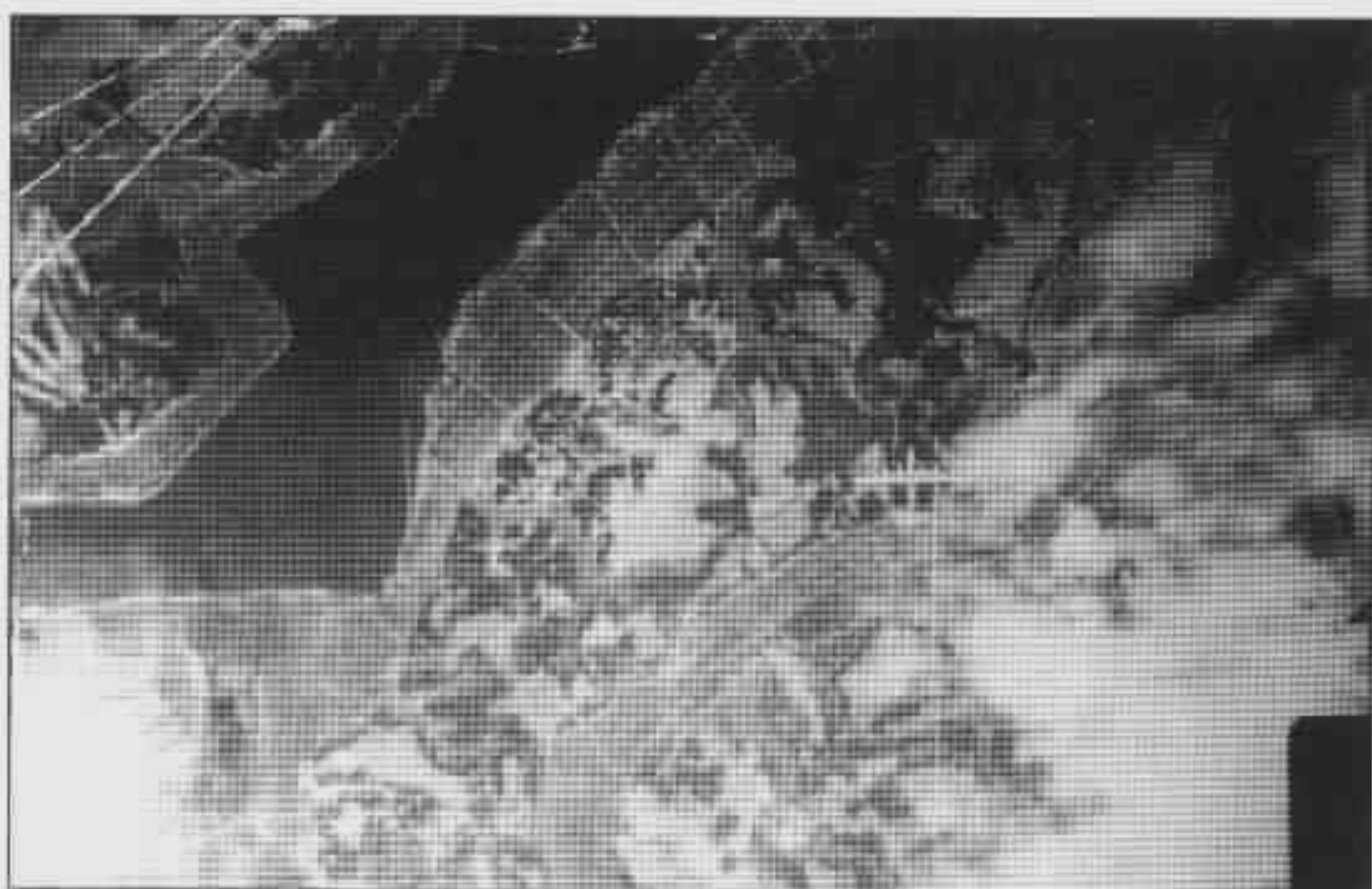
Kashiide was also an eyewitness to the beginning of the atomic age, for he viewed the nuclear destruction of Hiroshima and Nagasaki from the air.

On 17 September 1985 Capt Kashiide met Raymond F 'Hap' Halloran, the navigator aboard *Rover Boy Express* which he had shot down over 40 years before. They shook hands in the spirit of friendship brought by decades of peace, and marvelled at how they had both survived the war.

Second Lieutenant Makoto Ogawa

Makoto Ogawa was born in 1917 in Shizuoka Prefecture. He joined the 7th Air Regiment at Hamamatsu in 1935 and eventually transferred over to fighters. In August 1938 Ogawa graduated from the Kumagaya Aviation School in the 72nd term class, but instead of being posted to a front-line unit, he was employed as an assistant flight instructor at his old school. Finally, towards the end of 1941 he was transferred to Manchuria to serve with the 70th Sentai.

For the first three years of the Pacific War the 70th Sentai fulfilled the air defence role for the northern extremities of Manchuria, but in the autumn of 1944, it was brought back to defend Tokyo – it re-equipped with Ki-84s to perform this task. After more than seven solid years as a pilot, Ogawa had attained a high level of proficiency, and during night operations against B-29s, he quickly developed a method of frontal assaults. During daylight missions, however, Ogawa would only commence his attack once the bombers had started to drop their load, as the



Capt Kashiide's victim over Tokyo on 27 January 1945 was 'T Square 27' *Rover Boy Express* of the 878th BS/499th BG, shown here streaming smoke having received a direct hit from a 37 mm shell. Six crewmen died in the subsequent crash, but five survived, including Raymond 'Hap' Halloran, who shook hands with Kashiide in 1985 (via R Halloran)

One of the best combat pilots in the JAAF in the final months of the war, 2Lt Makoto Ogawa shot down seven B-29s and two P-51Ds in his decidedly inferior Ki-44-II-Otsu 'Tojo', and duly became the top pilot in the 70th Sentai. The weathered grey eagles on the fuselage of his aircraft represent B-29 victories (via Y Izawa)



B-29 pilots would be forced to maintain level flight during the release. This made them easy targets for Ogawa, and he downed two Superfortresses using this method of attack. By war's end he had destroyed seven B-29s and two P-51Ds, a score which made Ogawa the top pilot of the 70th Sentai. On 9 July 1945 he was awarded the Bukosho from Gen Seiichi Tanaka, and promoted to second lieutenant.

Ogawa is now a businessman, and he resides in Tokyo.

Sergeant Nobuji Negishi

Nobuji Negishi became the top B-29 'killer' of the 53rd Sentai during the home defence period. He was born in 1924 in Saitama Prefecture, and entered the Tokyo Army Aviation School in October 1939. Upon graduation in 1942, Negishi was assigned to the 244th Sentai, which had just been formed to guard the capital. After a short while he transferred to the 18th Sentai, before moving to the 53rd – both units were Japan-based.

The latter sentai had been formed specifically on Ki-45s so as to counter the B-29 forays over Japan. Sgt Negishi's first night mission on 10 March 1945 yielded instant success, for when ground searchlights lit up a formation of Superfortresses, he succeeded in knocking down two with precision shooting.

On 9 July 1945 Negishi was decorated with the award of the Bukosho for his successful missions against the B-29s. He ended the war with six Superfortress kills, and had damaged a further seven bombers.

He resides in his native prefecture.

Captain Chuichi Ichikawa

Chuichi Ichikawa became one of the great single-engined Superfortress killers in the final months of the war, overflying his native Tokyo. Born in the capital in 1918, he entered Kumagaya Army Flight School as a Youth Flight Programme cadet in February 1936, and after graduation the following year, joined the 9th Sentai.

The Nomonhan Incident was coming to a close by the time Ichikawa arrived in Manchuria to join his unit, and he duly failed to see any action. This was probably a fortunate thing for his sentai was still equipped with old Ki-10 Type 95 biplane fighters in September 1939, having still to transition to the newer monoplane Type 97 'Nates'.

In 1941, Ichikawa was assigned to the Air Inspection Division, where he test flew new aircraft and worked on their combat capabilities. In December 1942 he entered the Army Flight Academy, and upon graduation the following June, was assigned to the Ki-43 'Oscar II'-equipped 78th Sentai in Rabaul. Soon after his arrival, Ichikawa's unit shipped out to New Guinea – a theatre which soon earned the grim nickname of the 'Graveyard of Army Fighter Pilots'.

After several months of near-constant action, Ichikawa was seriously burned when his fighter was set alight during aerial combat. He somehow managed to survive the fierce blaze, however, and was sent back to the homeland for further hospitalisation. Upon recovery, Ichikawa joined the 244th Sentai, defending the Imperial capital.

It was in the home defence role that Ichikawa quickly made a name for himself, fighting bravely with remarkable skill. On the night of 15 April 1945 he downed two B-29s and damaged another, destroying one of the



Sgt Nobuji Negishi use the Ki-45 to down all six B-29s that he claimed to have destroyed – he also damaged a further seven Boeing bombers. This score made him the leading 'bomber killer' within the 53rd Sentai (via Y Izawa)

bombers through ramming it with his Ki-100 – he parachuted down from the collision badly wounded. Ichikawa received the Bukosho as a result of this action, being one of just five pilots known to have received the A Class award. He was also promoted to captain in June. By the end of the war Capt Ichikawa had claimed nine B-29s shot down and six more damaged, plus destroyed a single Hellcat.

He was killed in an air crash in September 1954 while working as a private pilot.

Captain Nagao Shirai

It is only recently that the wartime career of Capt Shirai has come to light, principally due to the research of Japanese aviation historian Takashi Sakurai of Tokyo. The latter has now established the fact that Shirai was not only the ranking ace of the 244th Sentai, but also possibly the leading B-29 'killer' of the JAAF.

Nagao Shirai was born in Hyogo Prefecture and graduated from the Army Military Academy in the early 1940s. He was assigned to the 244th Sentai in November 1942, but saw no real action until the bombing raids commenced on Tokyo in mid-1944. In October of that year he became the squadron leader of the 3rd Chutai, which he headed until the end of the war.

This capable fighter leader should have received more recognition than he has been accorded, for by war's end he had achieved 11 B-29 and two F6Fs kills, plus had damaged a further six enemy aircraft – all these victories were achieved using Ki-61 and Ki-100 aircraft.

After the end of the war Shirai avoided contact with his old comrades, and he never talked about his years in combat. He passed away in 1974.

Second Lieutenant Sadamitsu Kimura

Sadamitsu Kimura became one of the top JAAF B-29 'killers'. Born in Chiba Prefecture on 19 August 1915, by May 1938 he had entered flight training and was assigned to the 4th Sentai in 1942.

Kimura's entire war career centred around home defence duties and fighting B-29s. When the Boeing bombers first raided Japan on the night of 14/15 June 1944, Kimura took off in his Ki-45 from Kozuki Airfield to intercept them, and by the time he returned had claimed two B-29s shot down and three damaged. This was his unit's first major success up to that date, and he was duly awarded a ceremonial sword. Kimura also received a personal citation from Gen Shimomura of the Western Military District.

On 27 March 1945 he flew three missions during the night and claimed an incredible five B-29s shot down, with a further two damaged. On 1 May he was awarded the Bukosho for distinguished service.

On the night of 13/14 July 1945 313rd BW B-29s mined the Shimonoseki Straits, and Kimura reported by radio that he had damaged a Superfortress and was going in to finish the stricken bomber off – this was his last transmission.

Capt Isamu Kashiide, another great B-29 'killer' and a squadronmate of Kimura's, wrote in his postwar memoirs that the latter had shot down some 22 B-29s. Japanese historians have attributed him with eight victories, however.

APPENDICES

Flying Units of the JAAF

The flying units of the JAAF were organised much like their opposite numbers in Allied air forces. Japan's Army and Navy had their own air service, there being no independent air force.

The JAAF was organised into five air armies called Kokugun. Each air army had specific areas of operations. For example, in the spring of 1944 the 2nd Air Army was responsible for all of Manchuria, and had its headquarters in Hsingking, whilst the 4th Air Army administered the area of the Philippines, Celebes and western New Guinea from Manila. Their task was to co-operate with the local area army headquarters and to ensure the flow of equipment, supplies and personnel to wherever they were needed.

The Hikoshidan (air division) was the largest tactical organisation under Air Army control. It exercised operational and administrative control over lower air units in its command.

The Hikodan (air brigade) was the next organisation down from the air division, and there were usually two or more air brigades attached to a single Hikoshiden. This was a highly-mobile, operational, organisation, with a small headquarters staff. It was mostly concerned with tactical matters. The usual strength of each air brigade was three or four Hikosentais (fighter regiment or air group).

The Hikosentai, or simply sentai, was the basic operational unit of the JAAF. It was composed of three or more Chutais (companies or squadrons). Sentais had between 27 and 49 aircraft, with each squadron comprising roughly 16 aircraft and a similar number of pilots, plus a maintenance and repair unit. A fighter regiment would have roughly 400 officers and men.

The Shotai (flight or section) usually had three aircraft. This was the smallest flying unit, and later on in the war, it was sometimes composed of four aircraft – through hard experience, it had been found

that the odd man out in a three-fighter flight usually became separated in an engagement and would fail to survive.

JAAF Sentais of World War 2

1st Sentai

Established 5/7/38 at Kagamigahara, Saitama Prefecture, Japan

Aircraft: Ki-27, Ki-43 and Ki-84

Area of operations: Manchuria (Nomonhan), China, Burma, East Indies, Indochina, Rabaul, Solomons, New Guinea, Philippines, Formosa and Japan

Unit disbanded at Takahagi, Saitama Prefecture, at the end of the war

Remarks: First flying unit of the JAAF, it claimed 245 Soviet aircraft shot down and 95 probables at Nomonhan for the loss of 16 aeroplanes

4th Sentai

Established 7/38 in Fukuoka Prefecture, Japan

Aircraft: Ki-10, Ki-27 and Ki-45

Area of operations: Formosa and Japan

Unit disbanded at the end of the war at Ozuki Air Base, Yamaguchi Prefecture, Japan

Remarks: Distinguished itself in home defence of Kyushu. Leading B-29 killers were Capt Isamu Kashiide and 1Lt Sadamitsu Kimura (recipients of the Bukosho)

5th Sentai

Established 31/8/38 at Tachikawa (Tokyo)

Aircraft: Ki-10, Ki-27, Ki-45 and Ki-100

Area of operations: East Indies, western New Guinea and Japan

Unit disbanded at the end of the war at Kiyosu, south-east of Nagoya, Japan

Remarks: Home defence unit. Bukosho recipients were WO Isamu Hotani, WO Yoshio Sakaguchi and Capt Fujitaro Ito

9th Sentai

Established 1/7/38 in China

Aircraft: Ki-10, Ki-27, Ki-44 and Ki-84

Area of operations: Manchuria (Nomonhan) and China

Unit was disbanded at the end of the war at Nanjing

(Nanking), China

Remarks: Flew against B-29s

11th Sentai

Established 31/8/38 at Harbin, Manchuria

Aircraft: Ki-27, Ki-43 and Ki-84

Area of operations: Manchuria (Nomonhan), China, Indochina, East Indies, Burma, Rabaul, Solomons, eastern New Guinea, Formosa, Philippines and Japan

Unit disbanded at the end of the war at Takahagi, Saitama

Prefecture, Japan

Remarks: Lost 19 aircraft at Nomonhan, but claimed over 530 Soviet machines destroyed. Top JAAF ace was WO Hiromichi Shinohara

13th Sentai

Established 7/38 at Kakogawa, Hyogo Prefecture, Japan

Aircraft: Ki-10, Ki-27, Ki-43, Ki-45 and Ki-84

Area of operations: Korea, Rabaul, New Guinea, East Indies, Indochina and Formosa

Unit disbanded at the end of the war in Formosa

17th Sentai

Established 10/2/44 at Kagamigahara, Japan

Aircraft: Ki-61 and Ki-100

Area of operations: Philippines, Formosa and Japan

Disbanded at the end of the war in Formosa

18th Sentai

Established 10/2/44 at Choufu, near Tokyo, from the 244th Sentai

Aircraft: Ki-61 and Ki-100

Area of operations: Philippines and Japan

Unit disbanded at the end of the war at Matsudo, near Tokyo

Remarks: Lt Mitsuo Oyake won the Bukosho for

shooting down four B-29s (one by ramming) on 7/4/45 and damaging three others

19th Sentai

Established 10/2/44 at the Akeno Fighter School in Japan

Aircraft: Ki-61

Area of operations: Indonesia, Philippines, Formosa and Okinawa

Unit disbanded in Formosa at the end of the war

20th Sentai

Established 1/12/43 at Itami, Hyogo Prefecture, Japan

Aircraft: Ki-43 and Ki-45

Area of operations: Okinawa, Formosa and the Philippines

Unit lost nearly all of its pilots by 6/45 in suicide attacks at Okinawa

21st Sentai

Established 15/10/42 at Hanoi, Indochina, comprising the 84th Independent Fighter Squadron

Aircraft: Ki-27 and Ki-45

Area of operations: Philippines, Burma, Indochina and East Indies

Unit disbanded in Formosa at the end of the war

22nd Sentai

Established 5/3/44 at Fussa, near Tokyo

Aircraft: Ki-84

Area of operations: China, Philippines, Korea and Japan

Unit disbanded at the end of the war at Kimpo (Seoul), Korea

Remarks: First sentai to receive the Ki-84

23rd Sentai

Established 11/10/44 at Inba, Chiba Prefecture, Japan

Aircraft: Ki-43, Ki-44 and Ki-61

Area of operations: Iwo Jima and Japan

Unit disbanded at Inba at the end of the war

24th Sentai

Established 1/9/38 at Harbin, Manchuria, from the 11th Sentai

Aircraft: Ki-27, Ki-43 and Ki-84

Area of operations: Manchuria (Nomonhan), China, Formosa, Philippines, New Guinea, East Indies and Okinawa

Unit disbanded at the end of the war in Formosa
Remarks: During Nomonhan Incident claimed 214 Soviet aircraft shot down and 56 probables for the loss of 12 pilots

25th Sentai

Established 11/42 at Hankow, China

Aircraft: Ki-43 and Ki-84

Area of operations: China and Korea

Unit disbanded in Korea at the end of the war

26th Sentai

Established 2/10/42 in Manchuria

Aircraft: Ki-27, Ki-30, Ki-51, Ki-43 and Ki-44

Area of operations: Manchuria, China, Philippines, New Guinea, East Indies, Indochina, Formosa and Okinawa

Disbanded in Formosa at the end of the war

28th Sentai

Established 6/39 in Manchuria

Aircraft: Ki-46, Ki-61 and Ki-102

Area of operations: Manchuria and Japan

Disbanded 7/45

29th Sentai

Established 1/7/39 at Kagamigahara, Gifu Prefecture, Japan

Aircraft: Ki-27, Ki-44 and Ki-84

Area of operations: Manchuria, China, Philippines, Formosa and Okinawa

Disbanded in Formosa at the end of the war

30th Sentai

Established 30/6/43 in Manchuria

Aircraft: Ki-27 and Ki-43

Area of operations: Manchuria, Philippines and Burma

Disbanded 30/5/45 in Thailand

31st Sentai

Established 7/38 in China

Aircraft: Ki-10, Ki-61 and Ki-43

Area of operations: Manchuria and Philippines

Unit disbanded 30/5/45 in Singapore

33rd Sentai

Established 1/8/38 in China

Aircraft: Ki-10, Ki-27, Ki-43 and Ki-44

Area of operations: Manchuria (Nomonhan), China, Burma, India, New Guinea, East Indies and

Philippines

Disbanded at the end of the war at Medan, Sumatra

47th Sentai

Established 10/43 at Choufu, near Tokyo

Aircraft: Ki-44 and Ki-84

Area of operations: Japan and Okinawa

Unit disbanded at the end of the war at Ozuki, Yamaguchi Prefecture, Japan

Remarks: The unit was organised from the 47th Independent Squadron

48th Sentai

Established 5/11/43 in Manchuria

Aircraft: Ki-27 and Ki-43

Area of operations: China

Disbanded at the end of the war in Manchuria

50th Sentai

Established 10/9/40 in Formosa

Aircraft: Ki-27, Ki-43 and Ki-84

Area of operations: Philippines, Burma, western New Guinea, and Indochina

Disbanded in Formosa at the end of the war

Remarks: MSgt Satoshi Anabuki (top JAAF ace in WW 2) served with this unit

51st Sentai

Established 28/4/44 at Ozuki, Yamaguchi Prefecture, Japan

Aircraft: Ki-84

Area of operations: Philippines and Japan

Disbanded at the end of the war at Shimodate, Ibaraki Prefecture, Japan

52nd Sentai

Established 28/4/44 at Osaka, Japan

Aircraft: Ki-84

Area of operations: Philippines and Japan

Disbanded at the end of the war at Choufu (near Tokyo)

53rd Sentai

Established 3/4/44 at Tokorozawa, Saitama Prefecture, Japan

Aircraft: Ki-45

Area of operations: Japan

Disbanded at the end of the war at Fujigaya

Remarks: B-29 interception duties. Sgt Nobuo Negishi received the Bukosho

54th Sentai

Established 21/7/41 at Kashiwa, Gifu Prefecture, Japan

Aircraft: Ki-27, Ki-43, Ki-45 and Ki-84

Area of operations: China, Philippines, East Indies and Okinawa Disbanded at the end of the war in Formosa

55th Sentai

Established 30/5/44 at Taisho (near Osaka), Japan

Aircraft: Ki-61

Area of operations: Philippines and Japan

Disbanded at the end of the war at Sano, Nara Prefecture

56th Sentai

Established 8/44 at Taisho (near Osaka), Japan

Aircraft: Ki-61

Area of operations: Japan

Disbanded at the end of the war at Itami, Osaka Prefecture

Remarks: WO Tadao Sumi was a Bukosho recipient. Unit claimed 11 B-29s destroyed for the loss of 30 pilots

59th Sentai

Established 1/7/38 at Kagamigahara, Gifu Prefecture, Japan

Aircraft: Ki-27, Ki-43, Ki-61 and Ki-100

Area of operations: China, Manchuria (Nomonhan), Indochina, East Indies, New Guinea, Okinawa and Japan

Disbanded at the end of the war at Ashiya, Fukuoka Prefecture, Japan

Remarks: 1Lt Naoyuki Ogata was a Bukosho recipient

63rd Sentai

Established 25/2/43 at Hachinohe, Aomori Prefecture, Japan

Aircraft: Ki-27 and Ki-43

Area of operations: New Guinea

Disbanded 25/7/44 in New Guinea

64th Sentai

Established 1/8/38 in Manchuria

Aircraft: Ki-10, Ki-27, Ki-43 and Ki-44

Area of operations: Manchuria (Nomonhan), China, Indochina, Burma, Thailand and East Indies Disbanded at the end of the war in Cambodia

Remarks: The 64th was the most famous JAAF

unit during WW 2, and had the highest number of aces. They fought against the AVG. Unit claimed 258 victories in WW 2, and received nine unit citations up to 1/45

68th Sentai

Established 3/42 at Harbin, Manchuria

Aircraft: Ki-61.

Area of operations: Rabaul (New Britain), New Guinea, and Halmahera. Unit was destroyed by the USAAF, and disbanded 25/7/44 in New Guinea

70th Sentai

Established 3/41 in Manchuria

Aircraft: Ki-27, Ki-44 and Ki-84

Area of operations: Manchuria and Japan

Disbanded at the end of the war at Kashiwa, near Tokyo

Remarks: Capt Yoshio Yoshida and 2Lt Makoto Ogawa both received the Bukosho for their successes against B-29s

71st Sentai

Established 30/6/44 at Kameyama, Shimane Prefecture, Japan

Aircraft: Ki-43 and Ki-84

Area of operations: Philippines and Japan Disbanded at the end of the war at Hofu, Yamaguchi Prefecture

Remarks: Sgt Mizunori Fukuda attacked a flight of P-38s on 7/1/45, which resulted in the death of USAAF's second-ranking ace, Maj Thomas McGuire (38 kills)

72nd Sentai

Established 5/44 at Kita Ise, south-west of Nagoya, Japan

Aircraft: Ki-43 and Ki-84

Area of operations: Japan, Formosa, and Philippines

Disbanded in the Philippines 1/45

Remarks: Unit was annihilated. Survivors joined an infantry unit and fought as guerillas until the end of the war

73rd Sentai

Established 5/44 at Kita Ise with the 72nd Sentai

Aircraft: Ki-43 and Ki-84

Area of operations: Japan and Philippines

Disbanded (unofficially) 3/45 in the Philippines

Remarks: Unit suffered the same fate as the 72nd

Sentai, fighting on as ground troops

77th Sentai

Established 27/7/38 at Nanjing (Nanking), China

Aircraft: Ki-10, Ki-27 and Ki-43

Area of operations: China, Thailand, Burma, East Indies and New Guinea

Disbanded 25/7/44 in New Guinea

Remarks: Unit was destroyed by the USAAF, not one pilot surviving the war

78th Sentai

Established 31/3/42 in China

Aircraft: Ki-27, Ki-43 and Ki-84

Area of operations: Manchuria, Rabaul and New Guinea. Disbanded 25/7/44 in New Guinea

Remarks: Unit was destroyed by the USAAF

85th Sentai

Established 1/3/41 near Harbin, Manchuria

Aircraft: Ki-27, Ki-44 and Ki-84

Area of operations: Manchuria, China and Korea
Disbanded in Kimpo (Seoul), Korea, at the end of the war

Remarks: Claimed over 250 enemy aircraft destroyed/damaged from 7/43 until the end of the war

87th Sentai

Established 1/3/41 at Harbin, Manchuria

Aircraft: Ki-27 and Ki-44

Area of operations: Manchuria, Burma, East Indies and Japan
Disbanded in Singapore at the end of the war

101st Sentai

Established 7/44 at Kita Ise, south-west of Nagoya, Japan

Aircraft: Ki-27, Ki-43 and Ki-84

Area of operations: Okinawa and Japan
Disbanded at the end of the war at Takamatsu, Kagawa Prefecture, Japan

102nd Sentai

Established 7/44 at Kita Ise, Japan

Aircraft: Ki-43 and Ki-84

Area of operations: Okinawa and Japan
Disbanded 30/7/45 at Narimasu, Japan

103rd Sentai

Established 25/8/44 at Kameyama, Shimane

Prefecture, Japan

Aircraft: Ki-43 and Ki-84

Area of operations: Japan

Disbanded at the end of the war on Awaji Island (off the coast of Kobe), Japan

Remarks: Capt Tomojiro Ogawa and 1Lt Rintai Miyamoto were both Bukosho recipients

104th Sentai

Established 26/7/44 at Ozuki, Yamaguchi Prefecture, from the 4th Sentai

Aircraft: Ki-43 and Ki-84

Area of operations: Manchuria

Disbanded at the end of the war in Manchuria

Remarks: In 8/44 the unit reorganised as the 25th Independent Squadron

105th Sentai

Established 8/44 at Taichung, Formosa

Aircraft: Ki-61

Area of operations: Okinawa and Formosa

Disbanded at the end of the war in Formosa

111th Sentai

Established 10/7/45 at Akeno in Mie Prefecture, Japan

Aircraft: Ki-84 and Ki-100

Area of operations: Japan

Disbanded at the end of the war at Komaki, near Nagoya, Japan

Remarks: One of the last JAAF units formed

112th Sentai

Established 18/7/45 at Nitta, Japan

Aircraft: Ki-84 and Ki-100

Area of operations: Japan

Disbanded at the end of the war at Nitta

Remarks: The last JAAF unit to form. Their only combat occurred on 10/8/45 when four pilots damaged a B-29 of the 314th Bomb Wing over Tokyo

200th Sentai

Established 12/10/44 at Akeno, Mie Prefecture, Japan

Aircraft: Ki-84

Area of operations: Philippines

Disbanded 30/5/45 in the Philippines

Remarks: Survivors joined an infantry unit and fought as guerillas until the end of the war

204th Sentai

Established 4/42 at Chinsei, Manchuria

Aircraft: Ki-27 and Ki-43

Area of operations: Manchuria, Burma, Thailand, Indochina, Philippines, Okinawa and Formosa
Disbanded at the end of the war in Formosa

244th Sentai

Established 4/42, reorganised from the 144th Sentai

Aircraft: Ki-27, Ki-61 and Ki-100

Area of operations: Japan

Disbanded at the end of the war at Yokaichi, Shiga Prefecture, Japan

Remarks: Unit had nine Bukosho recipients including Maj Teruhiko Kobayashi, the JAAF's youngest sentai commander. It also had an air-to-air B-29 ramming unit. The sentai claimed 73 B-29s shot down and 92 damaged. It was the most famous home defence unit of the war

246th Sentai

Established 8/42 from the 13th Sentai

Aircraft: Ki-27, Ki-44, Ki-84 and Ki-46

Area of operations: Japan and Philippines

Disbanded at the end of the war at Taisho, near Osaka, Japan

248th Sentai

Established 10/8/42 at Ozuki, Yamaguchi Prefecture, Japan, from the 4th Sentai

Aircraft: Ki-27 and Ki-43

Area of operations: Japan and New Guinea

Disbanded 25/7/44 in New Guinea

Remarks: Destroyed by the USAAF

Aerial Victory Claims by JAAF Pilots

In the American and Commonwealth custom, the shooting down of five or more enemy aircraft entitled the pilot to claim the coveted title of 'ace'. He joined an elite fraternity of fighter pilots whose accomplishments were widely publicised in the military and national press. As the victories mounted, his achievements were recognised by medals and promotions.

The Japanese adopted many of the flight concepts from the West (Europe in particular). However, in Japanese culture, the trait of individuality which was so valued by the West, was shunned. Since early school days, Japanese chil-

ren are taught to work and sacrifice for the benefit of the group. In military training both before and during World War 2, it was common for the drill instructor to line up his trainees and strike them for the shortcomings of a single individual in the group. In war, teamwork was critical, and there could be no prima donnas. When an individual accomplished a distinguished feat, the group received the honours.

As with most fighter pilots, Japanese aviators did keep personal scores, and for morale purposes they would paint victory markings on the aircraft. Since pilots flew aircraft on an availability basis, and most did not have their own personal mount, the number of 'kill' markings on the aircraft could be deceptive. It was the fighter rather than the pilot which recorded the victory.

There was no established rule for determining a victory. Many pilots would claim the destruction of an enemy aircraft which was seen to smoke in the air, believing that it would never reach home. The Japanese did have gun cameras, but they were only used for training purposes. The claim was taken on face value and added to the group's score. Since there were usually no decorations, promotions or publicity based solely upon claims, there was no motive to inflate totals.

The claims by JAAF pilots cannot be taken at face value, however. The inflated totals resulted from both confusion in combat and from a very liberal method of scorekeeping. During the war, some JAAF pilots received official recognition from the government for their victories (taken from individual citations), but this does not imply that these victories were 'confirmed'.

Postwar Japanese historians have recognised the problem of inflated totals, and tried to compensate by systematically reducing the scores by percentages. A case in point would be Maj Yasuhiko Kuroe. He claimed 51 victories in his postwar memoir, but Japanese historians have 'corrected' his claim down to 30. Maj Iwori Sakai has nine recognised victories, although he claimed 15.

WO Hiromichi Shinohara is attributed with 58 victories during the Nomonhan Incident, but the Soviets only admitted losing 207 aircraft during the entire conflict. In analysing Shinohara's score versus the admitted losses, his claim would not seem to be credible.

Since there is no basis for verifying claims, the

postwar reduction of scores seem arbitrary. Likewise, accepting the claims on face value would also be historically inaccurate.

The following list of JAAF aces was compiled from numerous sources. These scores are simply unverified claims either made by the pilots, or attributed to them. The numerical scores represent a mixture of confirmed, unconfirmed, probable, damaged and imagined victories.

JAAF Aces Listing

Rank	Name	Score
WO	Shinohara, Hiromichi	58
Maj	Kuroe, Yasuhiko	51
MSgt	Anabuki, Satoshi	51
Maj	Sakagawa, Toshio	49+
WO	Nakada, Yoshihiko	45
Capt	Shimada, Kenji	40
WO	Kamito, Sumi	40+
WO	Sasaki, Isamu	38+
1Lt	Tarui, Mitsuyoshi	38
Capt	Kashiide, Isamu	33
Capt	Anma, Katsumi	32
1Lt	Kanai, Moritsugu	32
1Lt	Koga, Sada	31
Capt	Jobo, Ryotaro	30+
Capt	Takeuchi, Shogo	30+
2Lt	Aoyagi, Yutaka	28
Capt	Sumino, Goichi	27
WO	Shibata, Rikio	27
2Lt	Saito, Shogo	26+
Maj	Kimura, Takaji	26
1Lt	Hosono, Isamu	26
MSgt	Miyamoto, Goro	26
WO	Furugori, Goro	25+
MSgt	Hanada, Tomio	25
MSgt	Yoshiyama, Bunji	25
2Lt	Saito, Chiyoji	24
MSgt	Haraguchi, Kichigoro	24
Sgt	Kajinami, Susumu	24
WO	Ishizuka, Tokuyasu	23
WO	Kato, Shoji	23
Maj	Togo, Saburo	22
Capt	Asano, Hitoshi	22
Capt	Hasegawa, Tomoari	22
MSgt	Otsuka, Zenzaburo	22
Maj	Iwahashi, Jyozo	21
WO	Kira, Katsuaki	21

WO	Shiromoto, Naoharu	21
MSgt	Matsui, Morio	21+
MSgt	Sudo, Tokuya	20
Maj	Ishikawa, Kanshi	19
Capt	Ozaki, Nakakazu	19
WO	Ofusa, Yojiro	19
WO	Yamaguchi, Bunichi	19
MSgt	Kimura, Saburo	19
Capt	Wakamatsu, Yuki-yoshi	18+
Lt Col	Kato, Tateo	18
WO	Ishii, Takeo	18
WO	Shimizu, Kazuo	18
1Lt	Takamiya, Keiji	17
1Lt	Suzuki, Shoichi	17
WO	Hanada, Mamoru	17
WO	Takagaki, Haruo	17
Maj	Namai, Kiyoshi	16
Maj	Yonaga, Hyoe	16
1Lt	Kuroki, Tameyoshi	16
1Lt	Yajima, Yoshihiko	16
WO	Inouye, Misao	16
WO	Ito, Riichi	16
WO	Ogura, Mitsuo	16
MSgt	Motojima, Muneyoshi	16
MSgt	Shimokawa, Yukio	16
Sgt	Igarashi, Tomesaku	16
Maj	Sakai, Iwori	15
Capt	Nakamura, Saburo	15
Capt	Nango, Shigeo	15
2Lt	Masuzawa, Masatoshi	15
WO	Hazawa, Iwataro	15
WO	Matsuura, Toshio	15
WO	Seino, Eiji	15
MSgt	Ono, Megumu	15
MSgt	Otake, Kyushiro	15
Capt	Motomura, Koji	14
Capt	Onozaki, Hiroshi	14
WO	Minami, Takaaki	14
WO	Mune, Noboru	14
WO	Noguchi, Takashi	14
MSgt	Hirohata, Tomio	14
Sgt	Shono, Tadashi	14
Corp	Okuda, Jiro	14
Capt	Ito, Fujitaro	13+
Capt	Kurono, Shoji	13
Capt	Kuwabara, Yoshiro	13
Capt	Shirai, Nagao	13
2Lt	Shindo, Norio	13
WO	Takahashi, Takeo	13
Maj	Miyabe, Hideo	12+
Maj	Eto, Toyoki	12

Maj	Hinoki, Yohei	12
2Lt	Nishihara, Goro	12
WO	Iwase, Koichi	12
WO	Ishizawa, Koji	11+
Maj	Fukuda, Tokuro	11
Maj	Sawada, Mitsugu	11
Capt	Shishimoto, Hironojo	11
2Lt	Kanbara, Daisuke	11
MSgt	Suzuki, Eisaku	11
Sgt	Kodama, Takayori	11
WO	Tsubone, Kosuke	10+
WO	Yasuda, Yoshito	10+
Sgt	Kanazawa, Nobuo	10+
Capt	Ichikawa, Chuichi	10
1Lt	Shimamura, Miyoshi	10
WO	Nomura, Akiyoshi	10
WO	Tsubone, Kosuke	10
MSgt	Asano, Jiro	10
MSgt	Kobayashi, Taro	10
Maj	Hirose, Yoshio	9
Maj	Takiyama, Yamato	9
Capt	Kono, Kensui	9
Capt	Kani, Saiji	9
1Lt	Kawahara, Kosuke	9
1Lt	Nakazaki, Shigeru	9
1Lt	Takiguchi, Hiroshi	9
2Lt	Takahashi, Katsutaro	9
2Lt	Ogawa, Makoto	9
WO	Hayashi, Takeomi	9
WO	Ina, Akira	9
WO	Kimura, Yutaka	9
WO	Shimizu, Takeshi	9

Sgt	Kato, Kenji	9
Maj	Kawamoto, Koki	8+
Capt	Ito, Naoyuki	8
Capt	Miyamaru, Masao	8
Capt	Obara, Tsutae	8
Capt	Tsuchiya, Takashi	8
2Lt	Kanemaru, Teizo	8
2Lt	Kimura, Sadamitsu	8
2Lt	Terada, Shinobu	8
WO	Hida, Hitoshi	8
WO	Tashiro, Tadao	8
MSgt	Okubo, Misao	8
MSgt	Yamato, Mitsuo	8
Sgt	Nishioka, Shigetsune	8
1Lt	Fukuyama, Yonesuke	7
1Lt	Gomi, Hiroshi	7
1Lt	Sekiguchi, Hiroshi	7
Capt	Ikuno, Fumisuke	6
Capt	Yoshida, Yoshio	6
1Lt	Yoshioka, Yoshitaro	6
WO	Sumi, Tadao	6
Sgt	Negishi, Nobuji	6
Sgt	Noguchi, Yoshinori	6
Capt	Inayama, Hideaki	5+
Maj	Ishikawa, Tadashi	5
Capt	Takanashi, Tatsuo	5
Maj	Kobayashi, Teruhiko	5
1Lt	Ogata, Naoyuki	5
WO	Kawakita, Akira	5
2Lt	Nishio, Hannoshin	5
WO	Sato, Gonnoshin	5
Sgt	Nakano, Matsumi	5

1

Ki-27-Otsu of the 1st Chutai/11th Sentai, flown by WO Hiromichi Shinohara, Nomonhan, June 1939

The white lightning bolt markings on the tail of this 'Nate' indicates that the aircraft belonged to the 1st Chutai. Pilots flew the 'Nates' on an availability basis, and some painted red stars on the fuselage behind the cockpit to indicate victories over their Soviet opponents. This particular aircraft was lost on 25 July 1939 when Hiromichi Shinohara was forced to make an emergency landing after combat. He abandoned his aircraft and was picked up by a comrade as enemy tanks advanced on them. Shinohara set a JAAF record by downing 11 enemy aircraft in one day on 27 June (perhaps in this very Ki-27), and had amassed 58 victories by the time of his death in action on 27 August 1939.

2

Ki-27-Otsu of the 2nd Chutai/24th Sentai, Nomonhan, 1939

The kanji characters read 'Aikoku 318 (Dai Go Kaishima)' or 'Patriot 318 (No 5 Kaishima)' on this fighter. Kaishima was an organisation which had donated funds for the purchase of this aircraft, which was a common practice during the early war years. This particular 'Nate' was flown at various times in combat by Sgt Chiyoji Saito (21 victories), 2Lt Hyoe Yonaga (16 victories) and Sgt Goro Nishihara (12 victories).

3

Ki-43-I of the 3rd Chutai/64th Sentai, flown by Capt Katsumi Anma, Ipoh Airfield, Malaya, January 1942

In the spring of 1938 Anma claimed his first victory (a Chinese I-16) and went on to score five kills at Nomonhan. In August 1940 he became CO of the 3rd Chutai, and after claiming 32 victories was shot down and killed by P-40s of the AVG over Loiving, China, on 8 April 1942.

4

Ki-43-I of the 3rd Chutai/64th Sentai, flown by 1Lt Shogo Takeuchi, Malaya, early 1942

Although Shogo Takeuchi is believed to have downed more than 30 enemy aircraft with the 64th, his sentai CO, Lt Col Tateo Kato, would not permit pilots to paint victory markings on their aircraft, choosing instead to emphasise the teamwork aspect of his command. When Takeuchi transferred to the 68th Sentai in New Guinea, he promptly painted red eagle victory markings from his 64th Sentai combats onto his new Ki-61 Hien!

5

Ki-43-I of the 1st Chutai/50th Sentai, flown by Sgt Isamu Sasaki, Burma, 1942

Isamu Sasaki's 'Oscar' exhibits extreme weathering from the tropical environment endured by the sentai in Burma. The white kanji character on the fighter's tail reads 'Tobi', which is Japanese for black kite (a bird of prey within the hawk family) – 1st Chutai aircraft within the 50th were usually named after birds. Sasaki gained over 20 victories against Allied fighters in the CBI, and finished the war with at least 38 kills.

6

Ki-43-I of the 3rd Chutai/50th Sentai, flown by Cpl Satoshi Anabuki and 1Lt Shigeru Nakazaki, Burma, January 1943

Satoshi Anabuki painted three victory roundels on the tail of this 'Oscar I' to denote the P-40 he shot down on 25 October 1942 (his first kill in this machine) and a pair of Hurricanes destroyed on 19 January 1943. Shigeru Nakazaki added a further nine roundels before he was killed on 16 January 1943 in another Ki-43-I. This aircraft has been nicknamed *Fubuki* (snowstorm), which is painted in white kanji on its tail.

7

Ki-43-I of the 64th Sentai, flown by Group CO Maj Tateo Kato, Burma, Spring 1942

Unlike most other sentai commanders, Tateo Kato forbade his pilots from painting victory markings on their aircraft. This Ki-43-I (serial number 318) was adorned with a broad white diagonal band on the upper portion of each wing, thus allowing 54th Sentai pilots to readily identify his aircraft in flight.

8

Ki-43-I of the 2nd Chutai/25th Sentai, flown by Sgt Kushiro Otake, Nanking, China, Summer 1943

This sentai formed at Kanku as part of the Chinese occupation force in October 1942, and were issued with 'Oscar Is' as their equipment. They retained Ki-43 until receiving Ki-84s in the final months of the war.

9

Ki-43-II of the 3rd Chutai/54th Sentai, flown by MSgt Akira Sugimoto, northern Japan, late 1943

This aircraft was flown on numerous occasions by Akira Sugimoto on rather monotonous home defence patrols along the northern coast of Japan during 1943/44. He finally saw action when the unit was posted south to the Philippines in late 1944, and on 7 January 1945 he took on a quartet of P-38s from the crack 431st FS over the Negros Islands. He was belatedly aided in this combat by the 71st Sentai's TSgt Mizunori Fukuda in a Ki-84. During the swirling low-level dogfight, Sugimoto managed to force a P-38 into a fatal stall, its pilot, 431st CO Maj Tom McGuire (38 kills), crashing to his death. The 'Oscar II' had been badly shot up during the engagement, however, and its pilot, realising that he would never make it back to base, force-landed the stricken fighter in a jungle clearing. Despite landing safely in a textbook wheels up landing, Sugimoto was shot to death by Philippino guerillas as he tried to extricate himself from his crashed fighter (see *Aircraft of the Aces 14 Lightning Aces of the Pacific and CBI* for more details).

10

Ki-43-II of the 64th Sentai, flown by Capt Hideo Miyabe, Burma, Spring 1944

Hideo Miyabe became the 64th Sentai's executive officer in April 1944, and then assumed command of the unit some 12 months later. Despite scoring more than a dozen victories, he refrained from coveting publicity, and never visibly denoted his aerial successes on his 'Oscar II'. Note also that this aircraft lacks the traditional flight leader's diagonal fuselage stripe.

11

Ki-43-II of the 2nd Chutai/64th Sentai, flown by Capt Hideo Miyabe, Palembang Airfield, Sumatra, Summer 1943

This 'Oscar II' served as Miyabe's mount during his time as chutai leader in the East Indies in mid-1943. The diagonal stripe absent in the previous profile is plainly obvious here, its purpose being to aid in quick aircraft recognition during formation and combat flying.

12

Ki-43-II of the 3rd Chutai/64th Sentai, Lt Yohei Hinoki, Mingaladon Airfield, Burma, November 1943

Capt Yasuhiko Kuroe flew this aircraft as chutai leader until March 1943 when 2Lt Takeshi Endo became the new CO. Following the latter's death in combat on 15 May 1943 over Kunming, China, in another aircraft, 1Lt Yohei Hinoki inherited this battle-proven 'Oscar II' when he assumed command of the chutai. The 'Master Falcon' was flying this machine on 25 November 1943 when he shot down a P-51A flown by Col Harry Melton, CO of the 311th Fighter-Bomber Group.

13

Ki-43-II of the 3rd Chutai/59th Sentai, flown by MSgt Tomio Hirohata, New Guinea, Summer 1943

Tomio Hirohata was tutored in the ways of combat by veteran ace Yasuhiko Kuroe whilst based in China, and he later put these lessons to good use by surviving the deadly combats fought over New Guinea. He escaped the final slaughter of this campaign, and returned to Japan to fight in the equally one-sided Okinawan battles. By the time of his death on 22 April 1945, Hirohata had amassed 14 victories.

14

Ki-43-II of the 1st Chutai/33rd Sentai, flown by Capt Kiyoshi Namai, Gelumbang Airfield, Sumatra, Summer 1944

Kiyoshi Namai served as 1st Chutai leader from June 1943 through to May 1944, and in that time he scored the majority of his 16 kills. Denoting his position as chutai leader, Namai's 'Oscar II' is marked with a very wide fuselage band.

15

Ki-43-III-Ko of the 2nd Chutai/64th Sentai, flown by WO Kosuke Tsubone, Krakor Airfield, Indochina, May 1945

Kosuke Tsubone scored over ten kills and duly won the Bukosho for distinguished service in the CBI, receiving the award in Phnom Penh on 10 June 1945 from Lt Gen Takeshi Hattori, CO of the 5th Air Division. He ended the war at Krakor Airfield, and returned to Japan in May 1946.

16

Ki-43-II-KAI of the 1st Chutai/64th Sentai, flown by Chutai CO Maj Toyoki Eto, Saigon, Indochina, July 1944

Toyoki Eto was CO of the 64th Sentai from June 1944 until April 1945, when he returned to Japan and commanded the Ki-100-equipped 1st Daitai (squadron) of the 111th Sentai from July 1945 until war's end. He achieved at least 12 victories, two of which were scored whilst flying 'Nates during the Nomorhan Incident.

17

Ki-43-III-Ko flown by the 64th Sentai CO, Maj Hideo Miyabe, Krakor Airfield, Indochina, May 1945

The kanji character on the tail of this 'Oscar III' reads 'Aso', after Mt Aso of Hideo Miyabe's native prefecture in Japan. By this period in the war the 64th Sentai was seeing very little aerial combat, which was probably a good thing considering the obsolescence of their mount. It is believed that the last pilot casualty suffered by the sentai was Sgt Hideo Kato, who was shot down by P-51Ds of the 26th FS/5th FG over Vinh Airfield, Indochina, on 11 July 1945.

18

Ki-43-II of the 2nd Chutai/59th Sentai, flown by Capt Shigeo Nango, But Airfield, New Guinea, September 1943

A dedicated leader of men, Shigeo Nango virtually took over the running of the entire 59th Sentai when all the unit's senior officers either fell ill or were killed in action. He gained all of his 15 victories over New Guinea (many in this 'Oscar II'), and was finally felled to his death after attacking B-24s over Wewak in 23 January 1944.

19

Ki-43-II of the 25th Sentai, flown by Maj Toshio Sakagawa, Hankow Airfield, China, Spring 1944

The double zero tail marking on this Ki-43-II was quite unique, and denoted that the fighter was the personal mount of sentai commander, Toshio Sakagawa. A ruthless pilot when in combat, this veteran pilot knew exactly how to wring every last ounce of performance out of his obsolescent mount when embroiled in a turning dogfight with a USAAF fighter. Indeed, he managed to down three P-51B/Cs in May 1944 alone over Hankow – quite probably in this very 'Oscar II'. Sakagawa had claimed 49 victories by the time he was killed in an operational accident in the Philippines whilst flying as a passenger in a JAAF transport aircraft in December 1944.

20

Ki-44-II-Hei of the 3rd Chutai/70th Sentai, flown by Capt Yoshio Yoshida, Kashiwa Airfield, Japan, June 1945

This was the personal aircraft of Yoshio Yoshida, who commanded the chutai from February 1945 until war's end. The first two victory markings were dated 13 and 15 April 1945, and he survived the conflict having destroyed six B-29s, plus damaged a seventh – no mean achievement in the obsolescent *Shoki*. He also won the Bukosho.

21

Ki-44-II-Hei of the 3rd Chutai/70th Sentai, flown by 2Lt Makoto Ogawa, Kashiwa Airfield, Japan, June 1945

This weary combat veteran was the personal mount of Makoto Ogawa, who preferred to record his B-29 victories using stylised eagles. As the leading B-29 'killer' of the 70th Sentai, he downed seven Superfortresses plus two Mustangs. He too won the Bukosho.

22

Ki-84-Ko of the 246th Sentai, flown by WO Kenji Fujimoto, Taisho Airfield, Osaka, Japan, July 1945

This aircraft was flown on occasion by Kenji Fujimoto, who destroyed three B-29s (two by ramming on 13 and 16 March 1945) and duly won the Bukosho. He was killed in aerial combat with P-47Ns near Lake Biwa (north of Kyoto) on 14 August 1945 – just 24 hours before war's end.

23

Ki-45-KAI-Ko of the 3rd Chutai/5th Sentai, flown by Chutai CO Capt Fujitaro Ito, Kiyosu Airfield, Japan, March 1945

Totaro Ito used this aircraft to destroy the bulk of his 13 bomber kills, a tally which included no less than nine B-29s – understandably, he was awarded a Bukosho for his feats in combat. The white kanji characters on the tail reads 'Kuzuryu', which was a nine-headed dragon in Japanese mythology.

24

Ki-45-KAI-Hei of the 4th Sentai/Kaiten Tai, flown by Lt Miosaburo Yamamoto, Japan, early 1945

Miosaburo Yamamoto has had his surname written in Japanese phonetics on the tail of this Ki-45, which was a

somewhat common practice amongst suicide pilots. Yamamoto was killed in this machine during a ramming attack on a B-29 over Fukuoka Prefecture on 18 April 1945.

25

Ki-45-KAI-Ko of the 2nd Chutai/4th Sentai, flown by Lt Isamu Kashiide, Kozuki Airfield, Japan, 1944-45

Isamu Kashiide used this machine to perfect his lethal method of head-on attacks against B-29s over Japan in 1944-45. He enjoyed considerable success with this technique, claiming to have downed some 26 Superfortresses. Kashiide's 'Nick' boasted a 37 mm cannon as its primary weapon, his observer's hand-held single 7.92 mm machine-gun proving next to useless in fending off P-51D and P-47N escort fighters.

26

Ki-45-KAI of the 2nd Chutai/4th Sentai, flown by WO Sadamitsu Kimura, Kozuki Airfield, Japan, January 1945

This aircraft has a pair of obliquely-mounted (at an angle of 70°) Ho-5 20 mm cannon fitted in place of the 59 Imp gal upper fuselage tank. This arrangement was put to deadly use by Sadamitsu Kimura, who claimed to have destroyed 22 B-29s before he was shot down and killed by Superfortress gunners on the night of 13/14 July 1945.

27

Ki-45-KAI of the 2nd Chutai/4th Sentai, flown by Lt Hannoshin Nishio, Kozuki Airfield, Japan, June 1945

The kanji writing on the rear fuselage of this Ki-45 denotes that it was a donated aircraft, purchased for the JAAF by an organisation in Yamaguchi Prefecture near to where the 4th Sentai was based. Its regular pilot, Hannoshin Nishio, downed at least five B-29s in the final months of the war.

28

Ki-45-KAI of the 3rd Chutai/53rd Sentai, flown by Sgt Nobuji Negishi, Matsudo Airfield, Japan, November 1944

The operators of this 'Nick' marked all their aircraft with a stylised number 53 on the large vertical surface. Also fitted with 20 mm cannon, the Kawasaki 'heavy' fighter was utilised by leading sentai ace Nobuji Negishi, who destroyed six B-29s and damaged seven others.

29

Ki-61-I-Hei of the 244th Sentai, flown by Sgt Masao Itagaki, Chofu Airfield, Tokyo, January 1945

Masao Itagaki belonged to a B-29 air-to-air ramming squadron called the Shinten Seiku Tai. The white phonetic katakana character on the tail is the 'ee' in Itagaki. On 3 December 1944, Cpl Itagaki rammed and damaged a B-29 of the 498th BG ('T Square 49' Long Distance) over Tokyo, and managed to parachute to safety – he won the Bukosho for the attack. On 27 January 1945, he rammed another B-29 and again escaped by parachute to win his second Bukosho. From March to May, Itagaki flew kamikaze escort missions to Okinawa. He survived the war as one of only two known double Bukosho recipients.

30

Ki-61-I-Hei of the 2nd Chutai/244th Sentai, flown by MSgt Tadao Sumi, Chofu Airfield, Tokyo, November 1944

Tadao Sumi became a master the *Hien* in combat, and took his skills to the 56th Sentai in December 1944, where he had downed five B-29s and a single P-51D by war's end.

31

Ki-61-I-KA1c No 3295 of the 244th Sentai, flown by Group CO Capt Teruhiko Kobayashi, Japan, January 1945

This was the 'Tony' used by Teruhiko Kobayashi to ram a B-29 at 30,000 ft over Mt Fuji on 27 January 1945. He safely parachuted from the stricken *Hien*, having suffered the smallest of cuts across the bridge of his nose.

32

Ki-61-I-KA1c No 3024 of the 244th Sentai, flown by Group CO Capt Teruhiko Kobayashi, Japan, December 1944

This colourful *Hien* carries four silhouettes denoting Kobayashi's rising tally of B-29 claims. Whenever he obtained another aircraft, Kobayashi had his crew chief immediately apply his victory tally to the new fighter. By war's end his final Ki-61 would boast 14 victory markings, a total which also included those aircraft he had simply damaged. Many post-war historians have misinterpreted this total, thus giving Kobayashi credit for downing 14 aircraft, when in reality his final score was five exactly – three B-29s and two Hellcats, plus a further nine Superfortresses damaged.

33

Ki-61-I-KA1c No 3024 of the 244th Sentai, flown by Group CO Capt Teruhiko Kobayashi, Japan, April 1945

This profile again depicts No 3024 but at a latter date, with ten B-29 silhouettes and a pair of Hellcats detailed beneath the cockpit. Kobayashi's sixth kill is further embellished with a red Ki-61 sprayed over the white platform of a B-29 – this elaborate marking denoted the Mt Fuji ramming attack. To instill morale in his pilots, the sentai leader had the word 'Hisaho' ('confidence of victory') emblazoned on the rudder of his fighter in white paint.

Back Cover

Ki-61-I-KA1c of the 244th Sentai, flown by Group CO Capt Teruhiko Kobayashi, Japan, March 1945

Yet another Ki-61 associated with Kobayashi, this aircraft may have been the *Hien* he bailed out of on 12 April 1945 after it was badly shot up by B-29 gunners during an attacking pass. Due to the intense media interest in the exploits of the 244th Sentai, Kobayashi ensured that every aircraft he flew reflected the success of 'his' unit.

34

Ki-61-I-KA1c of HQ flight/244th Sentai, flown by TSgt Kiyoshi Ando, Japan, January 1945

Whilst serving as wingman for Capt Kobayashi, Kiyoshi Ando also rammed the B-29 over Mt Fuji on 29 January 1945 in this very *Hien*, but unlike his commander, the latter was killed in the crash.

35

Ki-61-I-Otsu of the 2nd Chutai/68th Sentai, flown by Capt Shogo Takeuchi, Wewak, New Guinea, October 1943

Most JAAF aces preferred the Ki-61 to the Ki-43 due to the former's increased armament, better armour protection and higher diving speeds. One of those who made effective use of the Kawasaki fighter was Shogo Takeuchi, who was quite probably the highest scoring JAAF ace in New Guinea. He had scored in excess of 30 kills in both the latter conflict and the CBI prior to his death on 15 December 1943. Takeuchi was lost when his badly shot up Ki-61 crashed short of the Hansa Airfield runway.

36

Unmarked Ki-84-Ko of the Army Flight Test Centre, flown by MSgt Isamu Sasaki, Fussa Airfield, Tokyo, 1945

Sasaki claimed three Superfortresses on the night of 25 May 1945 while flying this aircraft. A veteran of various campaigns during the Pacific War, his total score had reached at least 38 by war's end. Within this total were no less than six B-29s (he damaged a further three), the destruction of which earned him the Bukosho.

37

Ki-84-Ko of the 1st Chutai/103rd Sentai, flown by Capt Tomojiro Ogawa, Itami Airfield, Japan, January 1945

The white kanji character on the tail reads 'Mutsu' after Tomojiro Ofusa's native prefecture back in Japan. These names were added both for morale purposes and as a good luck symbol, the aircraft being christened jointly by the pilot and his crew chief. Most of the aircraft in the 1st Chutai were named after birds, Ofusa won the Bukosho on 10 June 1945 for distinguished service. Amongst his 19 victories were five Mustangs and two Thunderbolts.

38

Ki-84-Ko of the the HQ Chutai/ 50th Sentai, flown by Maj Koki Kawamoto, Phnom Penh, Indochina, April 1945

Koki Kawamoto flew this aircraft upon assuming command of the 50th Sentai in April 1945, the white kanji character on the tail reading 'Oni' (devil). The chutai colours on the fuselage lightning bolts were blue (HQ), red (1st), yellow (2nd) and white (3rd).

39

Ki-84-Ko of the 3rd Chutai/103rd Sentai, flown by 1Lt Shigeyasu Miyamoto, Itami Airfield, Japan, January 1945

Shigeyasu Miyamoto's first combat came in January 1945 when he intercepted B-29s over Japan. On 15 April he led eight fighters on a bombing raid against the north airfield on Okinawa, and on his return had to fight off the attention of a F6F-5 Hellcat. Miyamoto was wounded in the engagement and was forced to make an emergency landing in his 'Frank' on Tokuno Island. He won the Bukosho on 4 May for heroism during the Okinawan battles and survived the war.

40

Ki-84-Ko of the 1st Chutai/103rd Sentai, flown by Capt Tomojiro Ogawa, Itami Airfield, Japan, January 1945

Yojiro Ogawa participated in the Okinawan battles, leading his unit as they escorted *kamikaze* suicide aircraft to their targets, then confirming the results of these attacks – his chutai also strafed ships once the *kamikazes* had completed their attacks. On 29 April he was awarded the Bukosho from Lt Gen Michihiro Sugawara, CO of the 6th Air Division, for heroism. Capt Ogawa survived the war.

Figure Plates

1

Sgt Satoshi Anabuki, top ace of the JAAF during World War 2, is depicted during his time as an instructor at the Akeno Fighter School in the spring of 1944. His flying suit is typical JAAF summer issue, which was sadly far from fire-proof. Anabuki's leather boots are standard 'Air Force' brown, as opposed to the identical black versions worn by Navy pilots. His parachute harness is a Type 97, which came equipped with a quick release mechanism centrally placed over his stomach. The white cloth attached to the harness reads 'Sgt Anabuki', and acted as a warning to students not to borrow the instructor's flying equipment! As can be seen here, Anabuki was still wearing a glove over his slowly-healing left hand, which had been badly wounded during his legendary 'ace in a day' mission, flown on 8 October 1943 off the Burmese coast.

2

Seen in typical 1939 Nomonhan Incident flying apparel, MSgt Masatoshi Masuzawa was one of the leading aces of the 1st Sentai. The weather on the Mongolian border was often bitter, and in order to stave off the cold when flying at altitude, pilots were issued with winter flying suits made of gabardine wool and lined with fur – the exposed collar on this suit shows the lining off well. A matching fur-lined flying helmet was also a must, as were leather suede gloves. This early suit also has flaps over the trouser pockets. These often proved a hinderance in flight, and so were deleted on World War 2 issue suits. Note the static line running from Masuzawa's Type 97 right harness buckle to his parachute, and the pilot's rank insignia on his arm.

3

From one extreme to the other – the tropical environments of New Guinea and the CBI rarely made rabbit fur-lined flying suits a necessity. Indeed, a lightweight uniform that consisted of little more than a loose-fitting olive drab shirt and a pair of trousers soon proved to be the order of the day. Here, Cpl Susumu Kajinami of the New Guinea-based 68th Sentai models his faded flying suit in late 1943. There was no standard placement for rank insignias within the JAAF, pilots tending to pin them onto their sleeve, collar or chest.

4

Capt Fujitaro Ito of the 5th Sentai prepares to enter his Ki-45 at Kiyosu Airfield, Japan, in March 1945. The high altitude battles fought between USAAF B-29s, and their escorts, and the JAAF, forced the latter aircrew to wear electrically-heated flying suits like this. The wiring contained within these one-piece suits made them incredibly bulky, whilst the fur lining that dated back to the pre-war period made them even more unwieldy. An officer carrying his ceremonial sword into combat with him had no practical purpose other than to act as a symbol of authority, plus perhaps bring its bearer good luck 'in the hunt'. Ito is wearing his rank insignia on his left sleeve.

5

2Lt Yohei Hinoki of the 64th Sentai is seen in service dress in China in the spring of 1942. A distinguished ace who was embroiled in many an action, Hinoki gained fame later in the war as Japan's 'Douglas Bader', for he too lost a leg (to a P-51A attack). Depicted devoid of flying gear, Hinoki has exchanged his battered flying boots for the service issue 'high top' variety. He is also wearing a 'soft' cap and has his ceremonial sword in his left hand. The former item is adorned